Chapter V. A Few Contextual Stories

A. The Web of Causation

This may be an odd stage in which to resort for the first time to a conscious discussion of this work's methodology. Nevertheless, such a discussion is not only required at this point, it is also appropriate for two reasons. First, while the first four chapters shared a similar methodological perspective and mode of analysis, this concluding chapter shifts the focus and supplies a different look at the issues previously discussed. How these two very different outlooks relate to each other must be explained. Second, as the reader will soon find out, both this explanation of the relationship between the parts and the substantive task undertaken in this chapter require a comprehensive and detailed picture of the overall conceptual-structural transformation of patent and copyright law in the period surveyed. The bulk of this work provided an account of this picture. In this chapter I want to use this foundation in order to provide a start- and a start only- to the daunting task of placing this picture within the larger context of changing American society during the relevant period.

The focus of this work up to this point has been an internalist one. The analysis was primarily preoccupied with the minute details and the process of development of the conceptual structure of intellectual property within the legal field. Accordingly my main concern was with legal doctrines, categories and modes of argumentation. I have resorted to issues that relate to other social fields external to the legal realm only when and to the extent necessary. Namely, I have done so only when legal conceptual structures were so bundled together with ideas and practices from other social fields that it was impossible to completely separate the different factors, even for analytical purposes.

I did not adopt this methodological perspective because I believe that the legal field is completely independent and autonomous or that it develops in a vacuum or in response to completely internal principles and forces. I did not adopt it because I think that the legal field was necessarily and always the most important causal factor in the development of the modern concept of intellectual property. The complex set of concepts composing the systems of meaning surveyed in this work developed as a result of an interaction between a myriad of causal factors encompassing all aspects of human existence that were all mediated through human agency.

The reason for the internalist perspective of this work is twofold. First, I believe that the legal field and closely related social fields of discourse were the sites where our society happened to develop and embed the most elaborate version of the conceptual scheme of intellectual property. In this sense the law is not necessarily the primary cause of the modern scheme of intellectual property, but it is certainly the primary medium where this set of concept is most clearly articulated. Hence if one wanted to understand the fundamental features as well as the nuances of this system the obvious place to start and on which to focus would be the legal field. As always, there are, of course, extremely hard questions of diffusion and translation when one tries to generalize beyond a technical field of discourse familiar mainly to a small cult of professionals who speak a mysterious language, and argue that the structures that developed there applied in broader social spheres. Nevertheless, while conceding that most people know nothing of such things as the doctrine of equivalents or the fair use doctrine, I think that in this particular context there are good reasons to think that, to the extent that people know anything at all about intellectual property, their basic notions are roughly similar to the much more refined and detailed structures embedded within the legal field. If this is true, it makes sense to treat legal discourse as the main dialect and other fields as Creole version. It also makes sense when analyzing a little-charted field to start by focusing on the main dialect, leaving the Creole versions for another day.

The second reason for the intenralist perspective is my belief that within the complex causal interaction that shaped the conceptual system of intellectual property the legal field was not merely passive and reactive. I do not think that the law was merely a superstructure whose forms changed to reflect some other "real" or "final" social causes, material or ideal. The law, like all other factors involved, was both active and reactive. As it was shaped by these various factors it was also a shaping force. As such, the legal field should be treated as having a relative autonomy. While its form and content is considerably influenced by other social forces, it also retains (to various degrees in various contexts) its own "width," its own partially independent power to channel human behavior and thought and to influence other fields.

Taken together, these two reasons make a case for an important and legitimate intellectual history of the internal structures and concepts of the legal field. A history that, while not denying or forgetting the importance of other social factors, brackets them in order to focus in depth on the field of law. I attempted to provide such an account. Now, however, I want to briefly un-bracket some of those other social factors and their connections to the developments described earlier in detail. Providing a complete account of all the various social factors that produced the modern scheme of intellectual

property and the interaction between them would be a formidable task; one that would take several volumes and at least one lifetime. Thus, what I provide below is not such a total account. Instead, I try to develop a general analytical framework for the task and I begin to supply a few of the brush strokes, many more of which will be needed before the picture is even close to being complete.

Existing accounts of the various factors that took part in the development of modern intellectual property are relatively sparse. To the extent they exist, each of these accounts tends to identify and focus on one causal factor. Thus many point at technological change as the underlying force behind the emergence and development of intellectual property. The most common reference is to the appearance of the printing press. This new technology, it is often explained, entailed a series of changes in the modes of production and marketing of texts, which, in turn, gave rise to a growing pressure for mechanisms for protecting and securing investment and to the development of copyright. Others explore the connection between patterns of economic activity and development and the institutional details of the patent and copyright regimes. Yet another school of writing surveys the connection between the concepts of intellectual property and other related ideological strands such as the modern western concept of the original

¹ See e.g. Paul Goldstein, Copyright's Highway: From Gutenberg to the Celestial Jukebox (rev. ed. 2003).

 $^{^2}$ ELIZABETH L. EISENSTEIN, THE PRINTING PRESS AS AN AGENT OF CHANGE: COMMUNICATIONS AND CULTURAL TRANSFORMATIONS IN EARLY MODERN EUROPE (1979).

³ See e.g. B. ZORINA KHAN, THE DEMOCRATIZATION OF INVENTION: PATENTS AND COPYRIGHTS IN AMERICAN ECONOMIC DEVELOPMENT 1790-1920 (2005); B. Zorina Khan & Kenneth L. Sokoloff, *History Lessons: The Early Development of Intellectual Property Institutions in the United States*, 15 J. Econ. Persp. 233, 235 (2001); B. Zorina Khan & Kenneth Sokoloff, *Institutions and Democratic Inventions in 19th Century America: Evidence from "Great Inventors*," 94 Am. Econ. Rev. 395 (2004); Naomi R. Lamoreaux and Keneth L. Sokoloff, *Intermediaries in the U.S. Market for Technology, 1870-1920*, in FINANCE, INTERMEDIARIES AND ECONOMIC DEVELOPMENT (Stanley L. Engerman et al eds. (2003); R. Lamoreaux and Keneth L. Sokoloff, *Market Trade in Patents and the Rise of a Class Specialized Inventors in Nineteenth Century United States*, 91 Am. Econ. Rev. 39 (2001)

author⁴ or possessive individualism.⁵ Finally, of late, some interest arose in analyzing the political economy of intellectual property, that is to say, the connection between the interest group interaction of the political process and the development of intellectual property law.⁶

To date, there was little attempt to analyze a broader picture, combining these different factors and exploring the intricate connections between them. The only explicit attempt to do so, I am aware of, is by William Fisher. Fisher sets out to explain the expansion in the scope and strength of various intellectual property rights over the last two hundred years. 8 My interest here is slightly different. I am interested in explaining in context the particular institutional and conceptual forms that patents and copyright acquired during the period covered. Expansion was certainly one aspect of this development, but the phenomenon that needs explaining is richer and more particular. Expansion might have occurred in various specific forms. The bulk of this work, however, described in detail one particular contingent set of forms and structures that the framework of patents and copyright actually assumed. Despite this difference, unsurprisingly, the basic classification of the relevant shaping factors remains close to that suggested by Fisher. Some of the shaping forces were technological, some were ideological, others were economic, others still political, and finally some of the forces are best understood as internal to legal discourse.⁹

⁴ See e.g. THE CONSTRUCTION OF AUTHORSHIP: TEXTUAL APPROPRIATION IN LAW AND LITERATURE 16 (Martha Woodmansee & Peter Jaszi eds. 1994); Martha Woodmansee, *The Genius and the Copyright: Economic and Legal Conditions of the Emergence of the "Author,"* 17 Eighteenth-Century Studies 485 (1984); Peter Jaszi, *Toward a Theory of Copyright: The Metamorphosis of "Authorship,"* Duke L. J. 455 (1991).

⁵ Mark Rose, Authors and Owners: The Invention of Copyright (1993).

⁶ Robert P. Merges, *One Hundred Years of Solicitude: Intellectual Property Law 1900-2000*, 88 Calif. L. Rev. 2187 (2000).

⁷ William W. Fisher III, *The Growth of Intellectual Property: A History of the Ownership of Ideas in the United States* (2001).

⁸ *Id.*, at 6.

⁹ Fisher does not mention technology as a separate factor. Judging by the pragmatist criterion explained in the text, I think that the analysis is best

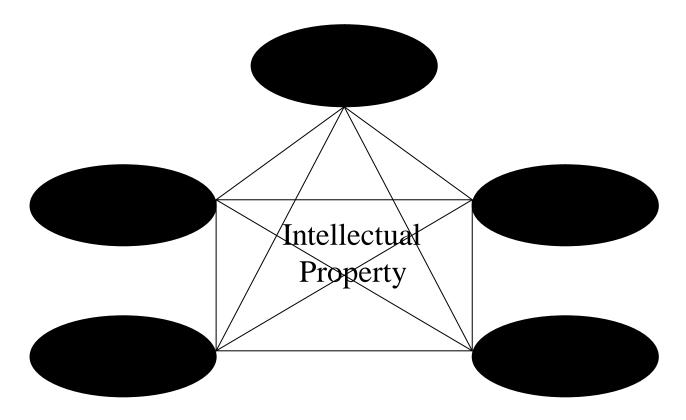


Fig. 1 Contextual Factors

Figure 1 describes the relationship between these various contextual factors. ¹⁰ In essence, this relationship can be understood by generalizing the relative autonomy thesis explained above in regard to the legal field. None of the factors operated in isolation from the others. None of them was an absolute cause, determining the others, or an absolute effect, merely reflecting the other forces. Instead, all of the factors were partially

served by differentiating technology as a separate element in the explanatory scheme.

¹⁰ The multi-factor model described in fig. 1 is inspired by Fisher, *supra* note 7; and LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE (1999). Lessig, however, uses a similar model for analyzing a somewhat different question. Lessig focuses on the question: "what regulates human behavior?" My own interest here is with the question of "how did the conceptual structure of intellectual property develop?"

autonomous. They were causes whose internal dynamic influenced other social spheres, but also effects, shaped and constrained by other forces. Even what, on first blush, might appear as an obvious example of a determining rather than determined factor- the technological development of the printing press- conforms to this description. The appearance of the printing press in England was indeed a major motivating force in the development there of the early origins of Anglo-American copyright describe in chapter 2. Yet, on further reflection it becomes apparent that the specific institutional forms of those early mechanisms, far from being the direct outcome of the printing press alone, were shaped by a myriad of other forces. Patterns of economic and social activity, the structure of governmental power, the dominant forms of administrative and legal procedures, the political balance of power between interested groups, and ideological beliefs about the role and character of governmental power all combined to produce the printing patent and the stationers' copyright. Moreover, printing technology and its social effect were constrained and shaped by some of these factors. Such crucial issues as the persons who could acquire the technology or use it and the ways and conditions of use were all influenced and shaped by forces external to the technology itself. In the long run, it is likely that technological development itself was partially determined by some of those other forces.

When one understands the causal factors in this way as mutually constitutive, the borderlines between them tend to blur. It becomes hard to say, for example, where ideology ended and law began and where exactly the dividing line between economic and technological factors or between ideology and economic interests passed. At the end, the multi-factor model threatens to break down into an undifferentiated causal mass- one seamless web of causation. Still, it seems useful to distinguish between several classes of factors. Not because the analytical distinctions necessarily correspond to any real world neat division, but simply on the pragmatist ground that it is likely to be useful in trying to analyze and grasp a complex reality.

In what follows, I begin to pour some substantive content into this model. The analysis is a first step rather than a last word in two senses. First, for feasibility reasons, the contextual account will be limited to the developments surveyed in chapters 3-4, that is to say, the evolution of patents and copyright in the United States between the late eighteenth century and the end of the nineteenth century. Second, I focus on three substantive clusters of social forces that participated in shaping the specific conceptual structures of these two fields. I paint in broad strokes. There is still much work to be done both in identifying additional contextual clusters and in further refining our understanding of the ones I discuss and of the interaction between them.

The three substantive clusters of late eighteenth and nineteenth centuries social developments I discuss are: a) the rise of the market; b) the move from a commonwealth polity to a liberal state; c) individual authorship and inventorship. All three of these clusters were complex social phenomena with different aspects. They all involved all or most of the various kinds of factors identified above. The rise of the market is naturally identified as an economic phenomenon, but it was an all encompassing transformation that involved all aspects of social existence. The move from a commonwealth polity to a liberal state is most readily understood as a change of political ideology and legal concepts, but it had also significant economic and political dimensions. Individual original authorship emerged as a dominant social ideology, but it was an ideology embedded in and bundled with social practices of various kinds. This multi-dimensional character of each of the clusters surveyed should be kept in mind. The emphasis of the analysis, however, will be on the ideological aspect of each of those clusters and their relations to the specific features of the modern structure of intellectual property. Although, these three substantive clusters, are not necessarily exhaustive, I do believe that they include some of the more central and influential factors that took part in the development of modern intellectual property.

B. Text: The Patterns of Modern Intellectual Property Law

Before getting to the context it would be helpful to be reminded of the "text" on which I am trying to shed some light. The "text" consists of the peculiar structures of meaning that developed in the nineteenth century for conceptualizing ownership of two sorts of intangibles: inventions and creative intellectual works. Although the two fields emerged from the same early origins, at the outset of the period covered in this chapter they already had disparate trajectories of development, rather unique institutional forms and different economic and social interests implicated. Hence, it is somewhat surprising that when one tries to abstract and identify general patterns of development the picture is one of remarkable similarity between the two fields. Although the resemblance is not complete, it is possible to talk of these joint patterns as the conceptual scheme of modern intellectual property. ¹¹

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As for the general legal category of intellectual property and the host of subfields gathered under its umbrella, these are best described using Wittgenstein's notion of family resemblance. Beyond the very general notion

There were three major dimensions to the transformation of the conceptual scheme of patent and copyright during the nineteenth century. Together these three aspects constitute the modern notion of owning intangibles. The first dimension of change involves the character and the institutional form of the relevant entitlements. The second relates to the identity and the concept of the relevant persons on whom the entitlements are conferred. The third and last aspect of transformation deals with the construction of the object in which the entitlements consist and with the related issue of the scope of such entitlements.

As for the character of the entitlements, both patents and copyrights transformed from a regime of ad-hoc privileges to a system of general rights. In the framework of ad-hoc privileges entitlements were created as part of a case specific "deals" between the sovereign and a particular individual. The individual would offer a specific "consideration"- some actual substantive contribution to the public good and would petition the sovereign for a specific reward. The sovereign would use its fully discretionary power to decide in each particular case whether to enter the "deal." It would consider whether the individual's contribution was valuable enough to justify the grant of protection and would tailor the exact terms of the privileges granted. Under this system no person had an enforceable right to demand and receive protection. To the extent that the law had any role in these exercises of sovereign power, it was not in defining rights of individuals. The law, would, rather, define the outer-limits of the power of the sovereign, the scope of cases within which government could employ its discretion and grant special privileges.

The enactments that granted individual privileges to entrepreneurs, publishers, inventors and authors in the colonies and the states¹² were close to embodying the ideal type of ad-hoc privileges. Such enactments were exactly discretionary exercises of the sovereign power of the legislature in order to create case-specific privileges. Each of these enactments was an independent policy decision in which the legislature decided that a specific contribution to the public good by a particular individual merited reward. Each involved an

of legal rights in intangibles it is hard to identify a set of essential traits common to all the members of this group. Nevertheless like in the case of members of one family there is a loose set of features of various kinds that tend to recur in many of these subfields. It is probably useful to think about patent and copyright as the senior siblings or even the parents in this family. See LUDWIG WITTGENSTEIN, PHILOSOPHICAL INVESTIGATIONS §65 (1953).

¹² See Chapter 1, sec. II; Chapter 2, sec. II.

ad-hoc exchange between the individual and the sovereign representing the community. This was the case, even in cases when the rhetoric of property, just reward and rights was used.

The framework of both patent and copyright transformed in the period surveyed and came to embody a different ideal type, that of general rights. Under this framework entitlements were no longer the result of ad-hoc discretionary decisions by the sovereign. Entitlements, rather, became legal rights defined by a universal legal regime. The law would define a standard set of substantive and procedural criteria applicable to all individuals. Any subject of the legal regime who met these criteria became entitled to a legally defined standard set of entitlements, as a matter of right. The sovereign's role in this scheme was now limited to ascertaining the fulfillment of the universally defined criteria, issuing the standard entitlements whenever they were met, and serving as an enforcing mechanism for such entitlements. An individual who met the standard criteria would have a legal right that could be enforced against the sovereign in the courts.

Despite the common general pattern copyright and patent followed somewhat different paths in undergoing the metamorphosis from ad-hoc privileges to general rights. Moreover, the end-result, although similar, differed in some respects. Patents followed a more gradual path. The 1790 regime included important moves toward standardization and universalization compared to the colonial and state grants. Nevertheless, it seems that in its core it was still based on the ad-hoc framework. The main difference was that it was key members of the executive rather than the legislature that played the role of the discretionary grantor. The 1793 reform and the no-discretion registration system it created formed another step in the direction of general rights. Whether intended or not, casting the courts in the role of the only state organ with the power to validate and invalidate patents constituted such a step. Yet in the period of 1790-1836 strong residues of the privilege model persisted. The main battlefield for conflicting views was the utility requirement that still functioned as a fossilized version of the discretionary grant mechanism. The 1836 new statutory regime that created, for the first time, an examination system was an important landmark in a conscious and explicit shift to patents as general rights. After 1836 the gradual decline of utility in the courts continued, until by the late nineteenth century little was left of the previous privilege framework.

Copyright decisively moved to a general rights system earlier. The 1780s state copyright statutes, although they existed in parallel to the continuing legislative grants, were an important shift in that direction. The 1790 federal regime unequivocally and comprehensively established

copyright as a general rights system, based on registration rather than any prior examination process. The extent to which earlier patterns survived and declined only gradually after this point was much less significant than in patent law. This happened mainly in the context of the originality requirement and its overlap with questions of copyrightable subject matter. A strand of cases in which judges were willing to engage in substantive inquiries about the social value of copyrighted works and deny protection to categories of works deemed as lacking merit echoed faintly the bygone approach in which each grant was conceived of as a governmental reward for a valuable social contribution. By the end of the century, however, even this remnant of the privilege framework declined.

The second pattern of development relates to the persons on whom the legal entitlements created by either copyrights or patents were conferred. By the end of the eighteenth century it became universally accepted, indeed taken for granted, that the relevant original owners in the case of either copyright patents were authors and inventors. This consensus stood in sharp contrast to earlier periods in which the direct grantees of privileges were the entrepreneurs who put into practice the actual publicly beneficial "consideration" promised. By 1790, however, there were no doctrinal concepts or mechanisms for defining and identifying authors and inventors. Throughout the next century there developed within legal doctrine complex structures of meaning that dealt with the figures of the author and the inventor as well as with the notions of authorship and inventorship. These structures both constructed these important constitutive concepts and functioned as gateway mechanisms regulating the borders of protection, admitting some and excluding others.

In copyright law the main doctrinal site were the construction of authors and authorship took place was the originality requirement. The doctrine, that started appearing in the late 1820s, was characterized by an internal tension from the moment it appeared. On the one hand, the conventional wisdom emphasized originality as the heart of authorship, which, in turn, was seen as the defining feature of copyright. On the other hand, there was a strong drive to define originality in minimalist, non-demanding terms. As the century progressed, this tension intensified. The content of the originality requirement, in either its novelty or merit aspects, was consistently eroded until by the dawn of the twentieth century its actual effect was almost negligible. Curiously, correlative to the decline of the originality standard, there was also a steady rise in the rhetorical and formal importance of originality in copyright law. Not only did courts and commentators refuse to dispense with originality, by the end of the nineteenth

century it was accorded a constitutional status and was often described as one of the most fundamental principles of copyright.

In the field of patents notions of inventorship were developed mainly in the context of discussions of the legally required differences between a patented invention and prior technological knowledge. Until the 1850s the doctrinal site of such discussions was the requirement of substantial novelty. In the second stage elaborations of the concept of the inventors migrated to a new independent patentability requirement that came to be known as nonobviousness. This development followed a similar, though not identical, pattern to that of the copyright doctrine of originality. The rise of the nonobviousness requirement was accompanied by a growing rhetorical importance of inventorship. Patents, it became common to assert, were limited to the handiwork of true inventors who introduced substantial advances as opposed to mere mechanics. At the same time, though, the application and interpretation of non-obviousness doctrine was marked by a growing reluctance of courts to engage in evaluations of comparative substantive value. Thus although non-obviousness ended up being a somewhat more meaningful limitation on eligibility for protection compared to originality, the semantic-rhetorical development pattern of the two was similar.

The third relevant dimension of change is the development of a concept of patent and copyright rights as ownership of a postulated intangible "objects," accompanied by intricate structures for conceptualizing such objects. Despite occasional references to "mental property," embedded in legal doctrine at the end of the eighteenth century was the more traditional notion of exclusive economic privileges. Under this concept the entitlements protected by either copyrights or patents were rights of exclusivity in exercising a particular economic activity. In the next century, this notion was supplanted by an alternative construction that was built into legal doctrines. Under this new construction, patents and copyrights constituted ownership of an intangible entity. There were two ingredients to this change. First there emerged intricate ways of conceptualization the relevant postulated intellectual entities. Second, ownership came to be understood as the power to exclusively control all uses of these entities.

In 1790 copyright, although conferred on authors, still had the form of the printer's economic privilege. In essence, it created a narrow entitlement to exclusively print and sell copies of a particular text. During the next century copyright was reconceptualized as ownership of an intellectual entity known as the "work." The defining principle of the work was that of an intellectual essence that could take a manifold of specific forms. The doctrinal aspect of

this development was twofold. First, the scope of copyright protection was expanded to cover an increasing sphere of derivative uses that could be traced back as embodiment of the intellectual work, changes of form notwithstanding. Second, the sole entitlement of making and selling copies was gradually supplemented by a lengthening list of other entitlements that offered control over other uses of works, irrespective of media or manner of use. This second aspect, expressed the notion of ownership as general control, although in reality copyright never became total control. Finally, parallel to the expansion of the theoretical concept of the work and of the scope of copyright protection, there emerged and gathered force a distinction between unprotectable ideas and protectable expressions. The idea/expression dichotomy that became a fundamental tenet of copyright served as the central mechanism for checking the potential expansion of copyright protection. It also stood in sharp tension, however, with the concept of the work and its doctrinal progeny. The work was based on the notion of an abstract intellectual essence that covers a multiplicity of forms. The concept created an inherent instability to the scope of copyright protection. In contrast, the idea/expression dichotomy painted a picture of firm and stable boundaries to copyright protection, based on the principle that such protection was limited to a concrete form rather than abstract ideas.

Patents underwent a very similar change during the same period. In 1790 the focus of patents was already firmly set on technological innovation and on invention as a form of information. Nevertheless, the basic form of the right was still that of the entrepreneur's exclusive economic privilege to engage in a certain economic activity. Doctrinal discourse lacked mechanisms for conceptualizing inventions as intangible entities. During the nineteenth century such mechanisms developed and were embodied mainly in the doctrines governing infringement and in subject matter and patentability rules. The basic concept of the invention that was latent in infringement rules and in the developing doctrine of equivalents was, again, that of an intellectual essence that could be expressed in a manifold of concrete forms. In this context too this concept was inherently instable and it underwent a steady process of abstraction as the century progressed. Finally, patent law's version of a limit-setting mechanism was patentability rules and in particular the rule against patentability of abstractions and rules of nature. Similar to the idea/expression dichotomy, these rules were characterized by a widening rift between their self-image and the actual doctrinal reality. While subject matter and patentability rules projected and image of clear and stable boundaries to the invention, they turned out to be an elusive shifting line under which one day's unpatentable abstract principles became the next day's patentable inventions.

These three aspects combine together to create the modern conceptual framework of intellectual property as ownership by individual creators of the intellectual entities they produced. The development of this peculiar set of concepts is, for the purposes of this chapter, the historical "text." In what follows I will provide three interrelated contextual stories that seem relevant for understanding and explaining this "text."

C. Context: Three Stories

1. The Rise of the Market

The first contextual story that may serve to illuminate the structural change of intellectual property law is that of the rise of the market. The changing practices and concepts of intellectual property law were part of this all encompassing process of transformation that took place in the eighteenth and nineteenth century. In one respect the changing patterns of patent and copyright constructed the rise of the market or a fragment of it. At the same time, however, these legal-conceptual changes were influenced and shaped by other aspects- economic, social and ideological ones- of the social process in which American society moved into modern capitalism.

A voluminous body of scholarship deals with the process of the rise of the market or the transition to capitalism in America. Earlier accounts that emphasized continuity and at times came close to arguing that capitalism came to America with the first ships¹³ were long deserted. They were superseded by descriptions of a long and complex process of transition from a pre-capitalist to a modern capitalist society. The rise of the market was not limited to economic changes. It was, rather, an all encompassing transformation that involved all aspects of individual and social human existence. The rich literature is full of conflicting accounts and disagreements about almost every aspect of the process. The main conventional division is

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¹³ See e.g. Louis Hartz, The Liberal Tradition in America: An Interpretation of American Political Thought since the Revolution (1955); Arthur M. Schlesinger, The Vital Center: The Politics of Freedom (1949). See also Carl Degler, Out of Our Past (1970). The cartoon like description of these works as claiming that capitalism arrived with the first ships is, unsurprisingly, an exaggerated version produced by later scholarship that sought to transcend these earlier accounts. For a general survey see: Michael Merrill, *Putting Capitalism in Its Place: A Review of Recent Literature*, 52 William & Marry Quart. 315 (1995).

between so called "market historians" and "social" or "moral economy" historians. ¹⁴ The former tend to focus on the economic aspects of the process both as explanatory elements and as criteria of assessment. They are also inclined to emphasize the extent to which an entrepreneurial ethos, a profit seeking motive and individualist economic growth aspirations were present early on, later to be fully realized when economic conditions changed to make it possible. Market historians usually downplay the conflicts and struggles involved in the process of change and present it as relatively consensual and voluntary. Finally, a characteristic approach in this strand of writing is to locate the completion of the shift, or at least the most important part of it at the time of the Revolution, or during the following decade. ¹⁵

In contrast, social historians emphasize other aspects of the process such as the everyday practices of "ordinary" people, the network of communal relations or norms and social ideological structures. Partly as a result of this focus, such scholars paint a picture in which the change from a pre-capitalist to a capitalist society was much more radical than the one presented by market historians. They also tend to highlight the extent to which the transformation involved resistance, conflicts and power struggles. As for the temporal perspective, the typical approach of social historians is to

¹⁴ The summary of the typical views of market and social historians is based on: Allan Kulikoff, *The Transition to Capitalism in Rural America*, 46 William & Marry Quart. 120, 122-126 (1989); Gordon S. Wood, *The Enemy is Us: Democratic Capitalism in the Early Republic*, 16 J. of the Early Republic 293, 293-298 (1996); Merrill, *supra* note 13, at 315-322. The term "moral econo my" is derived from the E.P. Thompson's famous account of the pre-capitalist ideology of the English countryside, by which many of the American history writers in this vein were inspired. See E.P Thompson, *The Moral Economy of the English Crowd in the Eighteenth Century*, 50 Past & Present 76 (1971).

¹⁵ Examples of works in this strand are: WINIFRED BARR ROTHENBERG, FROM MARKET PLACES TO A MARKET ECONOMY: THE TRANSFORMATION OF RURAL MASSACHUSETTS 1750-1850 (1992); James T. Lemon, *Early Americans and their Social Environment*, 6 J. of Historical Geography 115 (1980); Joyce Appleby, *Commercial Farming and the Agrarian Myth in the Early Republic* 68. J. Am. Hist. 833 (1982); JOYCE APPLEBY, CAPITALISM AND A NEW SOCIAL ORDER: THE REPUBLICAN VISION OF THE 1790S (1984).

describe the process as extending well into the nineteenth century until and even beyond the Civil War. 16

Despite these divisions and others, a lot is agreed upon by many of the writers. A large number of the disagreements stem from different methodological perspectives and from varying definitions of the object of transformation- "capitalism" or the "market." A synthesized account of the rise of the market in America, which necessarily flattens important differences, nuances and disagreements, would be roughly as follows. Between the second half of the eighteenth century and the middle of the nineteenth century the North-American economy and society were in a state of deep transition. It is possible to differentiate three interrelated dimensions of this transition. The first dimension involved economic patterns of behavior and organization, including modes of production and exchange. Large parts of the early American economy were organized around family households that functioned as the basic social-economic units in the system To a significant extent this was a sustenance economy centered around self-

Examples of works in

¹⁶ Examples of works in this vein are: James A. Henretta, *Families and Farms: Mentalité in Pre-Industrial America*, 35 William & Marry Quart. 3 (1978); JAMES A. HENRETTA, THE ORIGINS OF AMERICAN CAPITALISM: COLLECTED ESSAYS (1991); CHRISTOPHER CLARK, THE ROOTS OF RURAL CAPITALISM: WESTERN MASSACHUSETTS 1780-1860 (1990); Christopher Clark, *Household Economy, Market Exchange and the Rise of Capitalism in the Connecticut Valley 1800-1860*, 13 J. Soc. Hist. 169, 170-172 (1979).

¹⁷ The closer one gets to defining "the market" as any amount and sort of commercial exchange for profit the more willing she will be to identify early susceptibility to that framework and locate the end point early on. The more one inclines to identify "the market" with particular detailed modes of production and of exchange the less early susceptibility he will find and the later will be his identified end point. See Kulikoff, *supra* note 14, at 122, 125; Wood, *supra* note 14, at 293-294.

¹⁸ All scholars seem to agree that many of the transitions were not from one absolute pole to the other. The changes were, rather, more a matter of degree and extent. It is also clear that the process was gradual and that it varied by region. Markets expanded first on the local and regional level and then later in the nineteenth century, with the transportation revolution and other technological developments, on the national level. There were, of course, big differences right from the start between rural areas and the more urban and commercial centers. Finally the process expanded gradually, starting at the northeast, advancing inland and arriving late to the south and the west.

supply rather than exchange of surplus in the market. The households were usually not completely self-sufficient and participation in markets did occur, but much of their production was for self use and their reliance on exchange was limited. Moreover, even when exchange did happen much of it took the form of simple local barter and involved no systems of market prices or other sophisticated commercial and financial mechanisms. Production in this system was based on and controlled by two main sectors: the individual households and a group of individual usually self-employed artisans organized in a traditional system of masters, journeymen and apprentices.

The rise of the market involved a change of all of those patterns. Gradually, individual households and local regions became more dependent on exchange in markets both for supplying their needs and, as production of surplus for exchange increased, for selling their products. Massive participation in markets and dependence upon the market became a more ubiquitous and necessary reality. Control over manufacture transferred from individual households and artisans to increasingly large and concentrated workshops and manufactures controlled and ran by entrepreneurs. The phenomenon of wage labor in which people sold their labor as commodities spread. Markets themselves became not only more intensively used but also more sophisticated and complex. Markets became integrated- that is to say, prices converged to reflect overall supply and demand- first locally, then regionally and eventually on a national level. Barter of products gave way to purchase of commodities for market price and a growing number of financial instruments, mechanisms and institutions appeared. 19

The second dimension of the change had to do with social practices, social relations and patterns of interaction. The older system was based on a cohesive, paternal and hierarchical structure of family and community. Not only was the basic economic unit that of the household family, there also existed strong patterns and norms of cooperation between those different units. This system of cooperation is often described as one that was based on a combination of altruistic and egoistic purposes and norms. The rise of the market entailed the decline of this social system and its replacement by a

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¹⁹ See: Clark, Household Economy, *supra* note 16, at 170-172; Wood, *supra* note 14, at 293-297; Kulikoff, *supra* note 14, at 126-132; Merrill, *supra* note 13; Michael Merill, Cash *is Good to Eat: Self-Sufficiency and Exchange in the Rural Economy in the United States*, 4 Radical Hist. Rev. 42 (1977); Winifred, *supra* note 15; STUART BRUCHEY, ENTERPRISE: THE DYNAMIC ECONOMY OF FREE PEOPLE (1990); CHARLES SELLERS, MARKET REVOLUTION: JACKSONIAN AMERICA 1815-1846 9-33 (1991).

much more individualistic one. Increasingly the market existence of individuals became separated from both family and community. In this growingly separated economic sphere individuals would face each other more purely as maximizers of self interest. Patterns of cooperation on the one hand, and of social hierarchy on the other, gave way to competitive relations in the market. These changes were accompanied by a decline of the traditional systems of family authority and community norms. ²⁰

The third and last dimension of transformation was on the ideological-cultural level. The rise of the market involved a shift in values, beliefs, identities and fundamental attitudes. In the pre-market society people were more geared toward the supply of the family needs, independence and security, rather than toward the stronger notion of profit maximizing per se. This notion of well being and security was often referred to as "competency." Accordingly the main attitude toward the economic sphere, or at least the approach considered more legitimate, was that of strive for sustenance but also for security and independence, rather than for the creation of surplus and maximal accumulation of profit. In correlation to common social patterns of cooperation the dominant norm or outlook was relatively less focused on self advancement and more accommodating to notions of cooperation. As the process of change advanced these attitudes were replaced by a different outlook in which profit seeking, the accumulation of wealth and selfinterested individual advancement played a more dominant and explicitly legitimate role. In a market relations society people came to understand themselves and others, at least in the economic sphere, mostly as entrepreneurs or consumers.²¹

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²⁰ Sellers, *supra* note 19, at 13-16; Clark, Household Economy, *supra* note 16 at 170-177; *Sean Wilentz, Society, Politics and the Market Revolution 1815-1848*, in The New American History (Eric Foner ed. 1990); Kulikoff, *supra* note 14, at 124. Many of these historical accounts have a distinct nostalgic flavor and occasionally a tendency to romanticize this lost premarket past. This outlook, however, is not the only one. The most striking example of a much more optimistic view of these aspects of the rise of the market as liberating, equalizing and mobility-inducing is the work of Joyce Appleby. See e.g. Appleby Capitalism and the New Social Order, *supra* note 15., Joyce Appleby, Inheriting the Revolution: The First Generation OF Americans (2000). See also: Wood, *supra* note 14.

²¹ One of the best more nuanced accounts of the pre-market ideological system which is especially useful in not succumbing to idealizations or simplifications as well as in distinguishing between the English and the

What can the story of the rise of the market and that of the transformation of patent and copyright tell us about each other? On one lewel the specific conceptual-doctrinal forms that patent and copyright assumed were part of the emerging matrix of institutional forms that created the new economic and social exchange relationships. In other words, patent and copyright constructed the new market, or at least a fraction of it. The transformation of these two legal and practical fields constituted one aspect of the rise of the market. In this sense, it is the four first chapters of this work that illuminate or elaborate on this contextual story rather than vice-versa.

On a second level, the rise of the market produced many of the powers, interests and demands that took part in the shaping of legal doctrines. During the nineteenth century, the social economic fields and practices relevant to patent and copyright became increasingly subject to market interactions and mechanisms. Books and later other creative works as well as technology became commodities to be exchanged and utilized in the market. The array of entitlements in such materials became potentially important tools in devising strategies and obtaining power in existing markets and also in creating new ones. These market interactions created interests, demands, and pressures that exerted their power both on courts and legislatures and ultimately played an important role in the shaping of certain features of the legal structures. The expansion of the scope of the protected work in copyright and the rise of the general logic of derivative works, for example, should be understood in the context of the emergence, beginning in the first half of the nineteenth century, of a commercial publishing framework consciously attuned to utilizing and creating market demand by consumers and to developing new commercial markets. Similarly, the expansion of patentability and the growing abstraction of the "principle" as the object of property did not take place as pure metaphysical processes. Many of the

American cases is: Daniel Vickers, Competency and Competition: Economic Culture in Early America, 47 William & Marry Quart. 3 (1990). Other works on the topic are: Sellers, supra note 19, at 13, 15-17, 27; Clark, Household Economy, supra note 16, at 173-175; Christopher Clark, The Consequences of the American Revolution in the North, in THE MARKET REVOLUTION IN AMERICA: SOCIAL, POLITICAL AND RELIGIOUS EXPRESSION 1800-1880 (1996 Melvyn Stokes & Stephen Conway eds.); Kulikoff, supra note 14, at 126, 129; Elizabeth A. Perkins, The Consumer Frontier: Household Consumption in Early Kentucky, 78 J. Am. Hist. 486 (1991); David Jaffee, Peddlers of Progress and the Transformation of the Rural North 1760-1860, 78 J. Am. His. 511 (1991); ELIZABETH WHITE NELSON, MARKET SENTIMENTS: MIDDLE-CLASS MARKET CULTURE IN NINETEENTH CENTURY AMERICA (2004).

crucial cases such as those of the telegraph and the telephone involved commercial interests, sometimes particularly powerful ones, who tried to manipulate the law in order to control patterns of competition and secure market control, often with very high stakes involved.

I will expand more on this aspect of the rise of the market as the source of interests, demands and practical pressures in the last section that deals with authorship. Here, however, I want to focus on a third level of interaction between the rise of the market and the changing structure of patents and copyright. On this third level, one finds a high degree of correlation between the ideology of the market- the framework of concepts, attitudes and values produced by the rise of the market- and many of the central patterns of copyright and patent development. The argument, in other words, is that it was not just the practices of the rising market and the interests produced by it that partook in the shaping of legal forms. Rather, the process was also structured by the basic modes of thinking that took root in a market society.

To begin with, it seems that the overall framework of patent and copyright came to resemble that of a commodity in the market.²² One important feature of a commodity is standardization. A thing is a commodity with a market price only inasmuch as it is treated as being the same as any other comparable item. In the market a bushel of wheat is just the same and it costs just the same as any other bushel of wheat. To the extent that I attach a value to my wedding ring well beyond other identical rings, I do not treat it as a commodity. Patents and copyrights traveled from being similar to the unique wedding ring to being closer to the bushel of wheat in the market. The early individual legislative grants of privileges from which both patents and copyrights originated were different. Although these grants shared many features each of them was intrinsically unique. Both the circumstances that created the ground for protection and the terms of protection were treated as singular. Each case was judged and handled on its own terms. In a world of ad hoc discretionary privileges the same circumstances that were found to merit protection in one case could lead to rejection in another. Moreover, even when identical circumstances led to protection, in various cases the tailored terms of the grant could be significantly different. The gradual move to a general rights regime fundamentally changed this character of patents and copyrights. They became commodified not so much by allowing and

²² As explained by Lukacs, as market relations spread every aspect of human life tends to become and to be treated as a commodity. G. LUKACS, HISTORY AND CLASS CONSCIOUSNESS 87 (1976).

recognizing their transfer as by being standardized. The basic framework of the new regimes involved treating all cases as identical. A general uniform set of criteria defined when protection would subsist. The protection itself became standardized by including the exact same entitlements in each case. Thus patents and copyrights lost their previous inherent uniqueness and acquired the form of a standardized commodity.

To be sure, standardization notwithstanding, not all commodity-form patents and copyrights came to have the same "price" or value. The mechanism that was increasingly assigned the role of determining this final value, however, was also taken from the new conceptual world of the market. This mechanism was, of course, the forces of market demand by consumers. The concepts of patent and copyright as well as their doctrinal structures gradually came to rely heavily on this idea of the market as the only arbiter of value. In fact, this notion of market value is the strongest imprint left by the rise of a market culture in the structures of patent and copyright.

The theme of market value as both a positive and a normative concept was fundamental to the new market culture. As market exchanges became a dominant feature of everyday life, defining the value of a growing number of things as measured by the demand of buyers in the market became a widespread experience. In turn, this gave rise to a normative shift. Earlier relative willingness to measure transactions against a standard of inherent fairness gave way to a normative reluctance to challenge the outcomes or the prices produced by market exchanges. ²³

This shift was also reflected in more learned and theoretical fields of discourse.²⁴ In economic thought the theoretical concept of "value" underwent a profound transformation.²⁵ The focus gradually shifted from a distinction between market value on the one hand and use value or true value

The early ideological tendency of Americans to measure outcomes of market exchanges against a community standard of inherent fairness should be stated in moderate terms, especially by comparison to the English countryside context. See Vickers, *supra* note 21. Nevertheless, while avoiding overstatements, compared to the later total acceptance of the notion

of market value such early tendencies do seem substantial and significant.

²⁴ Appleby Capitalism and the New Social Order, *supra* note 15, at 26.

²⁵ George M. Armstrong Jr., From the Fetishism of Commodities to the Regulated Market: The Rise and Decline of Property, 82 Nw. L. Rev. 79, 86-91 (1987).

on the other, to a mode of thinking in which the latter lost all coherence and disappeared. ²⁶ In the late eighteenth and the early nineteenth century, many were still willing to employ the concept of inherent value or utility of resources. Market prices and the "real" or "intrinsic" value of a thing were considered to be two fundamentally different things. Thus Franklin could speak of "fair commerce" as the exchange of "equal values." Even Adam Smith still distinguished between a "natural price" and a "market price," although his focus was on the latter. ²⁸ As late as 1853 Francis Wayland distinguished between "intrinsic value" and "exchangeable value" and explained that "substances having an exchangeable value, do not possess that value, in proportion to their intrinsic value." Moreover for Wayland, even "exchangeable value" was defined by reference to some inherent objective qualities rather than by the whims of market demand alone. As he explained "the *degree* of the exchangeable value of any one substance depends chiefly upon the amount of labor and skill necessary to create that value." ³¹

As market culture diffused into theoretical thinking such tendencies were eroded. A new motion of market prices as synonymous with value in

²⁶ On the distinction between use value and exchange value see KARL MARX, A CONTRIBUTION TO THE CRITIQUE OF POLITICAL ECONOMY 53 (Maurice. Dobb ed. 1970).

²⁷ Benjamin Franklin, *Positions to be Examined Concerning National Wealth*, in 4 THE WORKS OF BENJAMIN FRANKLIN 236 (J. Bigelow ed. 1887).

²⁸ ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS 13, 25-29 (4th ed. 1850) [originally published in 1776]. By "natural price" Smith meant roughly what we would call "cost." *Id.*, at 25 (natural price is "what is sufficient to pay the rent of the land, the wages of the labour, and the profits of the stock employed in raising, preparing, and bringing it to market according to their natural rates"). Smith's views already signify an important change. The thrust of his argument was, of course, that absent "artificial" intervention market prices will be the same as the natural prices. Moreover, the natural price itself was already defined in market terms as "varies with the natural rate of each of its component parts" which in turn varies "in every society." *Id.*, at 29. Nevertheless, the very employment of the categorization is indicative.

²⁹ Francis Wayland, The Element of Political Economy 15-24 (1853).

³⁰ Thus "iron has a far greater intrinsic value than gold; yet an ounce of gold has a far greater exchangeable value than an ounce of iron." *Id.* at 17.

³¹ *Id.* at 19-20.

general gradually took root. "A thing may have an intrinsic utility," wrote Willard Phillips in his 1828 treatise on political economy, "but can hardly be said to have an intrinsic value, since its value depends upon the desire of others to obtain it from the possessor by giving something in exchange."32 Another writer explained that "practically, there is only this kind of value, and this kind of price known in the estimation of things. Commodities are exchanged for each other at their relative values and they are exchanged for money at their actual price." Later in the century, Arthur Latham denied the notion of an absolute value altogether and completely reduced value to a function of market exchanges. "Value, therefore," he wrote, "is not an inherent and invariable attribute, but is the relative power which one thing has of purchasing other things." Thus, "[i]n one word, value is always relative, and never absolute. To say that anything has an absolute value is a simple contradiction in terms."34

Nineteenth century Legal thinking followed an almost identical pattern. As demonstrated by Morton Horwitz, some of the most striking examples of market value orientation within the field of law occurred in early nineteenth century contract law.³⁵ According to this account eighteenth century contract law was still rooted in pre-market conceptions. The contract was usually conceived of as an instrument for transferring title in property having intrinsic value or, sometimes, a "customary price." Thus, expectation damages compensating for a loss of speculative value due to market fluctuations were almost non-existent. Moreover, since the latent assumption was that items exchanged had inherent objective value, the rules were much more geared toward examining the substantive equity of a transaction by comparing the values exchanged. An equitable transaction was one in which the inherent values exchanged were comparable. Various rules applied both in equity and common law- such as adequacy of consideration, the "sound price warrants a sound product" rule, the demand for equitable contractual claims or broad jury discretion to reduce damages due to considerations of fairness- expressed this outlook.

 $^{^{\}rm 32}$ WILLARD PHILLIPS, A MANUAL OF POLITICAL ECONOMY WITH REFERENCE TO THE INSTITUTIONS, RESOURCES AND CONDITIONS OF THE UNITED STATES 29 (1828).

³³ OLIVER PUTNAM, TRACTS ON SUNDRY TOPICS OF POLITICAL ECONOMY4 (1834).

³⁴ ARTHUR LATHAM, ELEMENT OF POLITICAL ECONOMY (7th ed. 1872)

³⁵ MORTON J. HORWITZ, THE TRANSFORMATION OF AMERICAN LAW 1780-1860 160-188 (1977).

As the nineteenth century progressed this equitable concept of contracts declined. The various specific rules expressing it were eroded, and the overarching notion of objective value was superseded by that of the sum of subjective individual desires as the only meaningful measure of value. In turn, this gave rise to the will theory of contracts under which the guiding principle was the subjective wills of individual parties rather than any substantive standard of fairness or adequacy of values exchanged. This was the legal form of a dominant assumption that no such thing as an objective value existed, and that the only measure of value was subjective individual wills.

Many of the specific changes of patents and copyright followed a very similar route, and reflected conceptual shifts parallel to those that appeared in economic thought and other legal fields. In fact, at almost any corner of the evolution process of these fields one finds some version of the rising notion of market value. One such important area was the emerging concepts of the intangible object of property in both patent and copyright law. The conceptual and legal debates around this subject were fraught with metaphysical arguments about the nature of intellectual works or inventions. Nevertheless, deeply woven into such arguments were almost always concepts of and assumptions about market value. In fact, the two sets of arguments about the nature of the intangible object of property and about market value were almost always locked together. The one informed and constituted the other.

This connection was most obvious in the process of construction of the "work" in copyright law. From the very early cases that began to desert the old notion of a right to print a copy and to expand the scope of protection, the concept of market value played a dominant role. Thus in 1847 Curtis identified the controlling principle for defining the scope of copyright by explaining that "to the author belongs the exclusive right to take all the profits of publication which the book can, in any form, produce." The metaphysical question of the borders of an intangible work was both precipitated and answered by the claim that the author had to collect all the market profits of his work.

Shifting the focus to market profit was the conceptual trigger that destabilized the traditional notions of protection. Thus t is exactly in this context that Story's famous observation that "[p]atents and copyrights

 36 George Ticknor Curtis, A Treatise on the Law of Copyright 237-238 (1847).

approach, nearer than any other class of cases belonging to forensic discussions, to what may be called the metaphysics of the law, where the distinctions are, or at least may be, very subtile and refined, and, sometimes, almost evanescent" should be understood. It was the notion of copyright as protecting market value that undermined the old rules and fueled the metaphysical inquiries. Again, Curtis supplied an excellent example of how the demise of the old rules (in this case the rule protecting abridgments), notions of market value, and the new concept of the work as an intangible entity were bundled together:

"When we consider the incorporeal nature of literary property, it will be apparent that no writer can make and publish an abridgment, without taking to himself profits of literary matter which belong to another."

Abridgments, as explained³⁹ were seen as a particularly extreme case, and the traditional rule that sheltered abridgments of copyrighted works attracted the most fire. The reason was that the abridgment, by definition, was designed to supersede the original and draw away some of its market profits. The same logic applied to the entire traditional structure of copyright. Once market value together with its twin concept- the intangible work as the object of property- became the focus, the old rules that sheltered all derivative uses were destabilized and they ultimately collapsed.

The same rational applied to Story's change of copyright's baseline by introducing the fair use doctrine. As Story explained in *Folsom v. Marsh*: "It is certainly not necessary, to constitute an invasion of copyright, that the whole of a work should be copied, or even a large portion of it, in form or in substance. If so much is taken, that the value of the original is sensibly diminished, or the labors of the original author are substantially to an injurious extent appropriated by another, that is sufficient, in point of law, to constitute a piracy pro tanto." Story changed the baseline of copyright protection from all non-verbatim subsequent uses being legitimate to all such uses being infringing unless "fair use" could be demonstrated. The underlying motivating force, however, was the notion of copyright as

³⁸ *Id.*, at 275-276.

³⁷ *Id.*, at 344.

³⁹ See Chapter 3, sec. C(1)(c).

⁴⁰ Folsom v. Marsh, 9 F. Cas. 342, 348 (C.C.D. Mass. 1841).

protecting against diminishing the market value of the work. The fair use analysis itself was framed with a focus on the question of whether the work would be superseded in the market or whether its market value would be diminished.

Similarly the logic of derivative works- the latent assumptions that a copyright owner had a right to control all aspects and media of the work- that took root during the nineteenth century was bundled with the notion of market value. Returning again to Curtis' analysis of the abridgment one can clearly see this interaction. An abridgment, Curtis wrote, does not only injure the sales of "copies which the true proprietor has already published but it also interferes with his use of the copyright, and of his power of disposing of it."⁴¹ As Curtis explained: "His copyright must be held to have secured to him the right to avail himself of the profits to be reaped from all classes of readers, both those who would purchase his production in a cheap and condensed form, and those who would purchase it in its more extended and costly shape."42 This circular and yet powerful logic would become endemic in modern copyright law. The notions of market value and of the right to control and utilize all "derivative markets" would define increasingly remote subsequent uses as derivative of the original work. In turn, the expanding scope of the postulated intangible work would define an increasing number of markets as derivative ones, the profit of which the owner was entitled to reap. The markets would define the work and the work would define the markets, ad infinitum. This process gathered force at the turn of the nineteenth century when the logic of derivative works deepened its hold on copyright thinking.⁴

Although somewhat less prominently, a similar interaction between the notion of market value and the concept of the intangible object of property occurred in patent law. Within the doctrines that defined infringement and the scope of protection a patent's object of property was identified with an increasingly abstract and instable intellectual entity- the "principle." Here too the abstraction of the object of protection was often bundled with claims that the market value of the invention or the ability of the inventor to reap profits in the market had to be protected.

In 1854 Curtis, at the outset of his patent law treatise, described the invention as a commodity. "[T]he intellectual conception of an inventor or a

⁴¹ Curtis, *supra* note 36, at 278.

⁴² *Id*.

⁴³ See Chapter 3, sec C(2)(C).

writer," he wrote, "constitutes a valuable possession capable of being appreciated as a consideration, when it passes, by his voluntary grant, into the possession of another."⁴⁴ Frequently when judges or lawyers argued for a broader more abstract interpretation of the protected invention they fell back on the argument that the full or true market value of this commodity had to be protected. When the other legal light in the Curtis family-Justice Benjamin Curtis- supported a broad scope of protection in Winans v. Denmead⁴⁵ he relied on the need to protect market value. He connected the maxim that a patent protected the principle rather than the mere form of the invention to the need to protect market value. "[T]he property of inventors would be valueless," he wrote, "if it were enough for the defendant to say, your improvement consisted in a change of form; you describe and claim but one form; I have not taken that, and so have not infringed.'46 Similarly, when in Le Roy v. Tatham⁴⁷ the dissenting Justice Nelson identified the object of protection with the abstract "principle" or the discovered "property" rather than the specific apparatus, he wrote: "Strike out this new property from their description and from their claim, and nothing valuable is left. All the rest would be worthless. This lies at the foundation upon which the great merit of the invention rests."⁴⁸

In this way, although somewhat less strongly than in copyright law, the metaphysical debates over the character and scope of the intangible object of patent protection were often infused with notions of market value. The need to protect market profits fueled the abstraction of the object of property. An abstract and instable object of property, in turn, marked new markets and profits streams as traceable to the original invention.

The strongest influence of the rising market conception of value can be detected in the doctrinal areas that came to define the extent to which copyright or patent protection would be based on substantive evaluations of utility or merit. The English origins and the early American antecedents of both patents and copyright were permeated with notions of inherent value or with the closely related concept of value as defined by the representatives of

⁴⁴ GEORGE TICKNOR CURTIS, A TREATISE ON THE LAW OF PATENTS FOR USEFUL INVENTIONS IN THE UNITED STATES OF AMERICA 3 (1854 2nd ed.).

⁴⁵ 56 U.S. 330 (1854).

⁴⁶ *Id.*, at 343.

⁴⁷ 55 U.S. 156 (1853).

⁴⁸ *Id.*, at 182.

the community. Patents and copyrights as ad hoc grants, either executive or legislative, demanded the would-be grantee to offer the community an actual real benefit of some kind. More importantly, the political representatives of the community had full discretion to weigh the value of the offered benefit from the perspective of the public good and decide whether it merited protection. When a grant was approved the exact terms of the protection were tailored according to the granting body's evaluation of the substantive value of the grantee's consideration. Since the typical grant was of privileges of exclusivity, demand by the public did play a role in the final value the grantee would end up internalizing. Yet it was only at this late stage that it came into play, after several crucial junctions in which public substantive criterion was employed to evaluate the benefit offered and construct the parameters of the reward given. Both as a matter of ideology and of practice, the market was allocated a minor role.

As we saw, the shift to general statutory regimes in 1790 involved a move away from the ad hoc privilege framework (this happened faster and more decisively regarding copyright). Nevertheless, various legal doctrines defined areas in which governmental representatives were assigned the role of evaluating value or merit and allocating reward accordingly. This was, of course, on a much smaller scale than in the earlier regimes. Still these were important vestiges of older notions of objective value and equitable reward determined by the community. As the century progressed these doctrinal areas became sites of conflict between such older notions and the rising concept of market value. The latter gradually prevailed and this was reflected in the changing doctrinal structures.

As for patents, it was described how by the late eighteenth century a new strand of thought in England began to glorify this mechanism because of its potential to keep government out of the business of assessing and allocating value. Previously patents were favored as a tool of patronage and industrial policy mainly because they were presumed to cost government nothing. The new trend, however, focused on the fact that as opposed to subsidies or other privileges, patents left the compensation of the grantee to the market that was assumed to allocate it in exact proportion to the invention's value to society. Similar ideas, gradually took over patent thought in the United States. Willard Phillips, the same person who wrote the political economy treatise that denied the concept of intrinsic value, depicted patents in his treatise on the subject exactly in these terms. Comparing methods of rewarding inventors, Phillips concluded that a patent is "the most

⁴⁹ Chapter 1, sec. I(C)(4)(b).

equitable, since it is graduated according to its utility in the public estimation; and the most convenient, since... the inventor is saved from the mistakes, favoritism and prejudices of censors, and the public from being imposed upon by charlatans and pretenders."

The battles over the utility requirement in patent law and the ultimate reshaping of this doctrine 51 reflected the rise of the market value approach to patents. The early strand of cases in which some courts demonstrated willingness to engage in substantive assessments of utility still showed strong vestiges of the traditional outlook. In effect, such courts were adhering to the view that inventions had an intrinsic value and that the role of the court, when reviewing patent validity was to assess this value as the representative of the community. The opinion of Judge Livingston in the 1822 Langdon v. De Groot is the most striking example of this approach. "[I]f the utility of the invention," Livingston wrote, "is also to be tested by the advantages which the public are to derive from it, it is not perceived how this part of the title is in any way whatever established."52 "Is any thing done to alter its texture, or to render it better or more portable, or more convenient for use?" he asked and replied: "In of this kind is pretended." 53 Most importantly, Livingston rejected as absurd the claim that the proof of utility was in the fact that consumers were evidently willing to pay "an enormous additional price" for the invention, compared to other competing products. The reason was that for such prices the consumer "literally receives no consideration." In other words, Livingston was explicitly relying on an objective measure of utility and using it to conclude that market demand, far from being the only measure of value, was, under some circumstances, the very thing from which the pubic had tom be protected.

The move to eviscerate the utility requirement that was started in the second decade of the nineteenth century pointed in exactly the opposite direction. It embraced market value as the only criterion for measuring utility and allocating reward, and rejected any attempt of assessing intrinsic value or of employing a discretionary community standard. As Story explained in *Lowell v, Lewis* "whether it be more or less useful is a circumstance very

 $^{^{50}}$ Willard Phillips, The Law of Patents for Inventions 20 (1837).

⁵¹ Chapter 2, sec. A(3)-(4).

⁵² Langdon v. De Groot, 14 F. Cas. 1099, 1100 (S.D.N.Y. 1822).

⁵³ *Id.*, at 1101.

⁵⁴ *Id*.

material to the patentee, but of no importance to the public. If it be not extensively useful, it will silently sink into contempt and disregard."⁵⁵ In other words, market demand came to be seen as the only measure of value and just reward. No external objective criterion of judgment was to be employed, at least as long as the invention did not cross the line of being immoral or mischievous. The committee that prepared the 1836 Act, similarly explained, that in the system it contemplated inventors "will generally derive a just and appropriate encouragement proportioned to the value of their respective inventions."⁵⁶

In the second half of the century this trend intensified. Although the utility requirement was not abolished it was reduced to insignificance. The earlier attempts to employ objective measures of utility faded away altogether and more self conscious assertions that the only judge of value was the market took over. Courts would come to identify value with market demand by openly declaring that "any element which increases the salability of an article may be said to contain the elements of utility." The tautology according to which any act of infringement was evidence of demand and hence of utility became commonplace. Sommentators adamantly rejected the suggestion that "balancing the good functions with the evil functions" of an invention was the role of the Patent Office or of the courts. In short, by the late nineteenth century the ideology of market value took over the utility requirement altogether.

One finds a strikingly similar pattern in the development of the originality doctrine in copyright law. Interestingly, the division between the old and the new concepts of value in the context of originality appears in an

⁵⁵ Lowell v. Lewis, 15 F. Cas. 1018, 1019 (C.C.D.Mass. 1817).

⁵⁶ John Ruggles, Select Committee Report on the State and Condition of the Patent Office, S. Doc. No. 228 (1st. Sess. 1836), reprinted in *1836 Senate Committee Report*, 18 J. PAT. OFF. SOC. 853, 855 (1936) [hereinafter Select Committee].

⁵⁷ Nebury v. Fowler, 28 F. 454, 460 (C.C.D.III. 1886).

⁵⁸ Lehnbeuter v. Holthaus, 105 U.S. 94, 97 (1882); Vance v. Campbell, 28 F. Cas. 956, 958 (C.C.S.D. Ohio 1859); Smith v. Prior, 22 F. Cas. 629 (C.C.D.Cal.1873).

⁵⁸ Nebury v. Fowler, 28 F. 460.

⁵⁹ Albert H. Walker, Text Book of the Patent Laws of the United States of America 65 (2nd ed. 1889).

early public exchange in the New York press uncovered by Elise Tillinghast. ⁶⁰ The debate revolved around the propriety and the eligibility for copyright protection of a modified and "improved" American version of Murray's English Grammar. An anonymous correspondent who attacked the American practice of awarding copyright to revised British books relied, among other things, on an originality argument that questioned the substantive merit of such improved works. Thus he wrote:

"The public should lend their ear with great caution to all pretended 'improvements' of European works; and when they see a bookseller, or any other mere money making adventurer, hold up to view, a copy-right to secure him the profits arising from the exclusive sale of the article, they may safely regard it as the cloven foot, which leads to the detection of the unsoundness of the owner. What a contrast do these adventurers often form with the real authors of the works they profess to improve."

The critical correspondent combined a peculiar elitist view of authorship, confident assertions as to the intrinsic value of works and a paternalistic approach toward public demand. Unoriginal works of low quality, the argument went, were unworthy of reward in the form of copyright and the public had to be protected from them

The answer, from the rival correspondent- "Vindex"- took a very different tack:

"How far he may have promoted the welfare of society, or advanced the interests of learning and literature, are other questions, to be determined upon by the public, to whom he appeals; but totally unconnected with his rights under the law.- from that he claims the protection of his property, equally whether it proceeds from the exertions of his mind or the labour of his hands."

⁶⁰ Elise Tillinghast, *A Literary Controversy in 1807 New York: Early Americans' Competing Views of Copyright Law* (unpublished manuscript 2002).

⁶¹ The weekly Inspector, February 28 1807.

⁶² The People's Friend, March 7 1807.

This argument did not deny altogether differences of degree as to objective value, but it did deny their relevance to copyright law. Within the realm of legal rights, judgments of value were to be left to the forces of public demand in the market.

In the case law the division between old-fashioned adherence to notions of intrinsic value and the new market value concept was even more conspicuous. From the moment it was introduced into copyright law originality was defined in minimalist terms. Nevertheless, in the earlier part of the century a strong line of cases was formed in which judges demonstrated willingness to engage in substantive assessments of merit and to deny protection when they found the copyrighted work lacking in this respect. The merit aspect of originality doctrine was the equivalent of the utility requirement in patent law, and it suffered a similar fate.

Since 1790 there was no longer any need for a copyright owner to point at a particular public benefit offered by his work and persuade the representatives of the community that it merited protection. When originality challenges started to appear in the courts no one tried to claim that such a strong requirement existed. Nevertheless, in a firm line of cases some judges engaged in substantive evaluations of the works for which copyright protection was claimed. The theory was that some classes of works were not within the domain of the "sciences and the useful arts" which Congress was expected and meant to promote by passing the Copyright Act. The 1829 Clayton v. Stone, which blazed the path of these cases, explained that "[t]he literary property intended to be protected by the act" should be determined by "the subject-matter of the work." ⁶³ "It would certainly be a pretty extraordinary view of the sciences," Justice Thompson wrote, "to consider a daily or weekly publication of the state of the market as falling within any class of them" and denied protection to a price catalogue 64 Many cases followed this line and denied protection to categories of works they found unworthy to be included under the category of works of science or learning. 65

⁶³ Clayton v. Stone, 5 F. Cas. 999, 1000 (S.D.N.Y. 1829).

⁶⁴ *Id.*, at 1001.

⁶⁵ See e.g, Scoville v. Toland, 21 F. Cas. 863 (No. 12,553) (C.C.D.Oh. 1848); Collender v. Griffith, 6 F. Cas. 104 (S.D.N.Y. 1873); J.L. Mott Iron Works v. Clow, 82 F. 316, 319 (7th Cir. 1897); Ehret v. Pierce, 10 F. 553, 554 (C.C.D.N.Y. 1880); Yuengling v. Schile, 12 F. 97, 100 (S.D.N.Y. 1882); Schumacher v. Schwencke, 25 F. 466, 467-468 (S.D.N.Y. 1885) Lamb et al. v. Grand Rapids School Furniture Co., 39 F. 474 (C.C.D.Mich. 1889).

Some other cases went even further. In these cases judges unabashedly engaged in substantive assessment of the merit of the protected work. In one of the most striking examples- *Martinetti v. Maguire* the court described the play that was at the heart of the copyrightability controversy as follows:

"a mere spectacle- in the language of the craft a spectacular piece. The dialogue is very scant and meaningless, and appears to be a mere accessory to the action of the piece - a sort of verbal machinery tacked on to a succession of ballet and tableaux. The principal part and attraction of the spectacle seems to be the exhibition of women in novel dress or no dress, and in attractive attitudes or action. The closing scene is called Paradise, and as witness Hamilton expresses it, consists mainly 'of women lying about loose'- a sort of Mohammedan paradise, I suppose, with imitation grottos and unmaidenly houris.'66

The court pointed out that "[t]o call such a spectacle a 'dramatic composition' is an abuse of language, and an insult to the genius of the English drama" and concluded that such a work is not "entitled to the protection of the copyright act." Even in 1903 one court could deny protection to a play it found devoid of merit and explain that "society may tolerate and even patronize such exhibitions, but Congress has no constructional authority to enact a law that will copyright them, and the courts will degrade themselves when they recognize them as entitled to the protection of the law."

These cases clearly expressed remnants of the earlier pre-market concept of value, or at the very least the conviction that at least within the limited realm of artistic works judgments of value and merit were not completely abandoned b the forces of the market. Some of these cases obviously reflected also the paternalistic flavor of the traditional view. Judges espoused in such cases the view that the public had to be protected by denying protection to what in their judgment were valueless or even depraved works.

^{66 16} F. Cas. 920, 922 (C.C.Cal. 1867).

⁶⁷ *Id*.

⁶⁸ Barnes v. Miner, 122 F. 480, 492 (S.D.N.Y. 1903).

The opposite approach to originality that gradually displaced the more traditional one, clearly expressed the move to a market view of value. Thus in the seminal case of *Emerson v. Davies* Story used language that closely tracked his views on patent utility. He explained that whether the author's work was 'better or worse is not a material inquiry in this case' since "[i]f worse, his work will not be used by the community at large; if better, it is very likely to be so used." ⁶⁹ In the crucial conclusion he explicitly fell back on a market value conception. A work, he wrote, "may be more useful or less useful," but the only significance of that is to "diminish or increase the relative values of... works in the market."

The consistent decline of the stricter approach to originality and the rise of Story's line that culminated in *Bleistein v. Donaldson Lithographic Co.*⁷¹ was marked by the displacement of intrinsic value notions by those of market value, even or as some came to argue particularly when the subject matter was expressive works. Such works were increasingly seen as commodities in a market. All questions of value were translated to those of public reception and demand, which in turn were translated to willingness to pay in the market. As one court explained when it identified what it called "the box-office value" test as the only viable one: with reference to matters like this at bar, touching which there are no rules except in the unmeasured characteristics of humanity, their reception by the public may be the only test on the question of insignificance or worthlessness under the copyright statutes."⁷²

The third important doctrinal area that was clearly influenced by the rising market value mode of thought is the change of the inventive quality requirement in patent law. I argued before that, contrary to common wisdom, the appearance of the non-obviousness doctrine after the 1854 *Hotchkiss v. Greenwood*⁷³ was not revolutionary in introducing a requirement of inventorship. The A requirement of inventive quality was incorporated in earlier periods into the substantial identity analysis performed under the doctrinal

⁷¹ 188 U.S. 239 (1903).

⁶⁹ Emerson v. Davies 8 F. Cas. 615, 620-621 (C.C.D.Mass. 1845).

⁷⁰ *Id.*, at 620.

⁷² Henderson v. Tompkins, 60 F. 758, 763-764 (No. 3,104) (C.C.D.Mass. 1894).

⁷³.52 U.S. 248 (1851).

⁷⁴ Chapter 4, sec. B(2)(a).

heading of novelty. The real difference was in the dominant understanding of the requirement. Before the Civil War invenotrship was usually understood in terms of significant substantive utility. As Curtis summed up this approach in his mid-century treatise: "There are many cases where the materiality and novelty of the change can be judged only by the effect on the result; and this effect is tested by the actual improvement." To be an inventor meant to create something substantially new, which in turn, meant to create something substantially better.

This, of course, placed courts in a position to judge, for purposes of this requirement, the extent to which specific inventions created a significant social benefit. Thus, much of the objective value analysis that courts increasingly shunned in the context of utility, survived in this doctrinal area. The latent assumptions of this structure were based on a pre-market conception of value according to which inventions had a readily detectable objective social value.

One of the main important substantive changes brought about by the formal shift to an independent non-obviousness requirement involved exactly this aspect of the doctrine. After the Civil War courts and commentators became increasingly reluctant to interpret the necessary demonstrable inventive quality as synonymous with objective value. In fact, they took pains to distinguish the two. As Robinson explained in 1890: "[t]he advance made by the inventor may be slight, the benefit conferred upon the public may be small, but though these considerations influence the recompense which he eventually receives, they do not affect the intrinsic character of the creative act." This new vision that internalized a market understanding of value refused to bring judgment of substantive value into the equation. Nonobviousness was to be defined by "the intrinsic character of the creative act" and questions of assessing value and allocating reward were to be left to the market. Even when utility returned to haunt non-obviousness as an evidentiary presumption, it was now defined in market terms. Courts would no longer ask whether the invention was beneficial to society but rather whether it enjoyed great success in the market or substantial sales.

Non-obviousness never completely purged patent law from all remnants of questions about substantive value or utility. The imagined "inventive faculty" and issues of substantive advancement and merit were,

 76 William C. Robinson, Law of Patents for Useful Inventions 130-131 (1890).

⁷⁵ Curtis, *supra* note 44, at 30.

and remained, too bundled together for this to happen. Yet the rise of the market conception of value displaced the earlier overt reliance on substantive utility. It shaped the doctrine in ways that tried to minimize such reliance and repress or deny it when it occurred.

2. From the Commonwealth to the Liberal State: Privileges and Rights

a. Government and the Economy: Changing Patterns

Of equal importance to the story of the rise of the market and of an even longer linage is the historical account of the nineteenth century transformation from a commonwealth style ideology and practice of government to the liberal state. The initial impetus for this narrative was refuting the myth of laissez-faire as a constant fixture in the United States from the moment of its creation. There is a large body of works, the most important part of which was produced by the "commonwealth" historical school,⁷⁷ that is devoted to tracing the extent to which the relationship between government and the economy in early nineteenth century America was light-years away form this myth of laissez-faire.⁷⁸ There are two related

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The Some of the seminal works in this vein are: OSCAR HANDLIN & MARY FLUG HANDLIN, COMMONWEALTH: A STUDY OF THE ROLE OF GOVERNMENT IN THE AMERICAN ECONOMY: MASSACHUSETTS 1774-1861 (1947); LOUIS HARTZ, ECONOMIC POLICY AND DEMOCRATIC THOUGHT: PENNSYLVANIA 1776-1860 (1948); CARTER GOODRICH, GOVERNMENT PROMOTION OF AMERICAN CANALS AND RAILROADS 1800-1890 (1960). See also L. RAY GUNN, THE DECLINE OF AUTHORITY: PUBLIC ECONOMIC POLICY AND POLITICAL DEVELOPMENT IN NEW YORK 1800-1860 (1988) For a general survey see: Harry N. Scheiber, *Government and the Economy, Studies of the Commonwealth Policy in Nineteenth Century America*, 3 J. of Interdisciplinary Hist. 135 (1972); Robert A. Lively, *The American System: A Review Article* 29 Bus. Hist. Rev. 81 (1955) (critical of the alleged commonwealth scholarship tendency to neglect the empirical examination of actual governmental practices and their effect).

⁷⁸ In this respect William Novak found close similarity between the commonwealth historical school and other clusters of scholarship including: the early American political science examination of nineteenth century governmental practices and institutions; sociological jurisprudence and legal realism exploration of the public nature of nineteenth century common law doctrines; the republican synthesis of American history. All of these,

aspects to these accounts that should be distinguished. First there is the question of the extent of governmental active intervention in the economy in the name of the public good, as well as the legitimacy of such intervention Second, there is the issue of the characteristic institutional forms and practices commonly used by government when engaging in such intervention and the exact ideological concepts justifying and constituting such forms.

As for the extent of governmental involvement in the economy, a wealth of evidence shows that the common understanding of early American government imputed to it both the right and the duty to actively intervene in the economy in order to promote the public good. The economic sphere was not seen as one best left to the forces of private enterprise. Government was, rather, seen as having a prominent role in shaping, aiding and regulating private enterprise. The public official and community purpose were to play a role just as important as that of the private entrepreneur and private ambition. 79 Indeed, the very term "economy" had a meaning different than the modern one. As William Novak explained, by the late eighteenth century the word roughly meant "any society ordered after the manner of a family or, similarly, the general administration of the concerns of a community with a view to orderly conduct and productiveness."80 Even the "market," whose rise was described in the previous section, rather than a spontaneous creation of pure private enterprise, was shaped and constituted by heavy regulation and institutional infrastructure produced by government.⁸¹

This concept of the role of government in the economy was grounded in a broader set of ideas and traditions about the relationship between individuals, community and government. The overarching ideological concept was that of the "public good." It postulated the existence of a harmonious interest common to the entire society, both different from and superior to mere individual interests or desires. 82 In the words of James Kent:

according to Novak, are preoccupied with the "associational, corporative, governmental and public-spirited strand in early American life." WILLIAM J. NOVAK, THE PEOPLE'S WELFARE: LAW & REGULATION IN NINETEENTH CENTURY AMERICA 2 (1996). Novak's own work is, of course, one of the most recent examples of scholarship that continues this tradition.

⁷⁹ Scheiber, *supra* note 77, at 135-136.

⁸⁰ Novak, *supra* note 78, at 87.

⁸¹ *Id.*, at 84-105.

⁸² Scheiber, *supra* note 77, at 136; Handlin & Handlin, *supra* note 77, at 53-54.

"Private interests must be made subservient to the general interest of the community."83 The role of government was conceived of as promoting and cultivating this common interest. Supporting this notion were long-standing legal and political traditions of both English or European and colonial origin. One such tradition was the notion of the "sovereign prerogative"- the idea that the sovereign had broad powers, responsibilities and authority to regulate numerous aspects of social life in the name of the public good. In the economic context the King was often referred to as "the arbiter of commerce."84 In the colonies and later the states similar powers and responsibilities were imputed to the local government. 85 Similarly the early notion of "police power" of the state, influenced by continental and Scottish political thought (that must be distinguished from its later post-bellum incarnation in American jurisprudence), justified plenary regulatory powers and responsibilities to the state. 86 Together these trends created the notion that dominated antebellum America, of a "well regulated society," a society in which the "people's welfare" was seen as the "supreme law of the land"⁸⁷ and in which government enjoyed broad legitimacy for intervention and regulation in the name of that ideal.

Intertwined with this account of the early nineteenth century well regulated society there is also the issue of the characteristic institutional mechanisms used by government in exercising its plenary regulatory powers. In one sense, at least, the description of the early nineteenth century United States as stateless⁸⁸ is not a myth. During that period governments in the United States did not develop an extensive state apparatus of the rational bureaucracy Weberian type that began to appear in some European countries.⁸⁹ The American society was, rather, "well regulated" by different

 $^{^{83}}$ 2 James Kent, Commentaries on American Law 265 (1826).

⁸⁴ J.D. Colier, Essay on the Law of Patents for New Inventions 64-65 (1802).

⁸⁵ WILLIAM FISHER III, THE LAW OF THE LAND: AN INTELLECTUAL HISTORY OF AMERICAN PROPERTY DOCTRINE 1776-1880 359 (Ph.D. Diss. 1991); Novak, *supra* 78, at 95.

⁸⁶ Fisher, *supra* note 85, at 359-60, Novak *supra* note 78, at 11-16; 86-88.

⁸⁷ Novak, *supra* note 78, at 9-10; 42-50.

⁸⁸ *Id.*, at 3.

⁸⁹ See Harry N. Scheiber, *Government and the American Economy: Three Stages of Historical Change, 170-1941*, in ESSAYS FROM THE LOWELL

means. One major instrument in the governmental arsenal for putting into practice the ideal of active promotion of the public good was a plethora of general regulations of different kinds, ranging from state legislation and licensing regimes, through local government ordinances to common law doctrines. ⁹⁰ Just as common, however, was a host of other more ad hoc governmental instruments. The variety was almost endless: bounties; grants of rights to charge tolls; special permissions to hold lotteries; specific mill laws; land grants; exemptions from forbidden activities; franchise and incorporation grants. ⁹¹ The style and mix of instruments used changed between different states ⁹² but the use of methods of the second group was rather common in many places.

It was this eclectic second group of techniques for governmental encouragement of the economy that was most characteristic of the commonwealth style of government. It had a few important characteristics. First, these governmental practices lacked any sharp public/private distinction. When government acted in these ways in order to promote the public good it often did not operate merely as what a modern observer might describe as a public regulator regulating private entities. On the one hand, government was often deeply involved in the "private" aspect of enterpriseidentifying goals, choosing particular parties and granting selective advantages. On the other hand, the private actors that were used as junior partners in such initiatives were frequently granted powers, such as eminent domain, that under later classifications might have been considered "public." In short, the whole public/private distinction was foreign in both theory and practice to this pattern of governmental activity. 93 Second, many of those mechanisms were inherently case specific. They were not based on universal standardized legal regimes but rather on ad hoc decisions to create specific privileges, powers or immunities. These two characteristics combined to create a third one. The particularistic nature of these mechanisms and the fact

CONFERENCE ON INDUSTRIAL HISTORY 1980-1981 128-129 (Robert Weible et al eds. 1981).

⁹⁰ Novak, *supra* note 78, at 3; Handlin& Hnadlin, *supra* note 77, at 64-67.

⁹¹ Handlin & Handlin, *supra* note 77, at 51-86; Fisher, *supra* note 7, at 8.

⁹² Scheiber, *supra* note 77, at 142-144, 146; Scheiber, *supra* note 89, at 134.

⁹³ See DANIEL WALKER HOWE, THE POLITICAL CULTURE OF THE AMERICAN WHIGS 98 (1979). On the reflection in legal thinking of this lack of a public/private distinction and its later appearance see: Morton J. Horwitz, *The History of the Public/Private Distinction*, 130 U. Pa. L. Rev. 1423 (1982).

that private parties were selectively endowed with extensive powers and privileges were grounded in a particular concept of the proper form of governmental action and power. Under this framework, the political representatives of the community were expected to use a broad discretion in order to hand out selectively encouragements in the service of the public good. This was an important feature. It went beyond the mere broad legitimacy of government to egulate in the name of the public good. It justified a particular institutional form of government regulation and involvement, one in which special private interests were rewarded selectively on the basis of an ad hoc political determination that such specific parties could be harnessed to serve the community interest. As one contemporary explained this outlook:

"It is for the present interest of every class, as well as every individual, to obtain a grant from the government, but no class or individual thinks of asking it, unless he can give some reason, and if he can give a good reason, it is as much for the interest of the community to make the grant as for his to receive it."

The ultimate manifestation of the commonwealth patterns of governmental involvement in the economy were corporate charters. During the early nineteenth century there were no general incorporation regimes. Corporations of all kinds were created by ad hoc legislative charters. There was no general right, based on standard criteria to receive a charter. Rather, they were awarded on the basis of specific legislative discretion exercised in the name of the public good. The justification of these special charters was a specific contribution to the community's welfare offered by the grantee, anything from the building of a bridge to the operation of a bank. In turn, the charters awarded case-specific tailored privileges and powers of various kinds. Corporate charters were thus ad hoc "deals" in which government bestowed special privileges in exchange for particular services to the public good by individual parties. ⁹⁶

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⁹⁴ Handlin & Handlin, *supra* note 77, at 70-71; Schieber, *supra* note 77, at 136; Fisher, *supra* note 7, at 8.

⁹⁵ Phillips, *supra* note 32, at 181-183 (1828).

⁹⁶ See: Seavoy Origins of the American Business Corporation 1784-1855: Broadening the Concept of Public Service During Industrialization (1982); George Heberton Evans Jr., Business Incorporation in the United States 1800-1943 (1948); E. Merrick

Commonwealth government and the ideology that supported it gradually declined since the 1830s. Novak dates the rise of the modern liberal state to the last quarter of the nineteenth century. He is correct in one important sense. Strong bissez faire ideology⁹⁷ on the one hand, and patterns of the bureaucratic administrative state on the other, appeared only after the Civil War. 98 The earlier shift related not so much to the broad legitimacy and extent of government regulation, but rather to the common institutional forms used by government and to the exact ideological vision that supported them. In this period American society was still a "well regulated" one, but it was now "well regulated" by different means grounded in a changing picture of the proper relationship between government and the economy. The Handlins called this new system that took over in the second quarter of the century the liberal police state. 99 Despite some first cracks of doubt, the liberal police state still enjoyed a relatively broad legitimacy of extensive regulation of private enterprise in the name of the public good. Such regulation was characterized, however, by a sharp decline in the legitimacy and use of the institutional form characteristic of the commonwealth. Ad hoc discretionary privileges came under attack and their use as a major governmental tool gradually faded away.

This shift was grounded in the rise of what can be loosely called a "Jacksonian outlook." I use this term since some of the important views characteristic of this outlook are usually associated with Jacksonians and they sometimes encountered entrenched resistance from their political rivals, the Whigs. Nevertheless, the term is used to mean more than merely a specific party platform. It was a general "persuasion" that eventually crossed party lines and outlived them. ¹⁰¹ Its roots were prior to the appearance of Jackson

DODD JR., AMERICAN BUSINESS CORPORATIONS UNTIL 1860 (1954); JOHN W. CADMAN JR., THE CORPORATION IN NEW JERSEY: BUSINESS AND POLITICS 1791-1875 (1949).

⁹⁷ Hartz traces the rise of laissez faire ideology in Pennsylvania to the 1850s. Hartz, *supra* note 77, at 289-320.

⁹⁸ Scheiber, *supra* note 89, at 135-139.

⁹⁹ Handlin & Handlin, *supra* note 77, at 243.

¹⁰⁰ On Whig resistance see: Howe *supra* note 93, at 99; HARRY L. WATSON, LIBERTY AND POWER: THE POLITICS OF JACKSONIAN AMERICA 34-35, 76-77 (1990).

and its power lasted even in times and places where Jacsonians were not in control.

The Jacksonian outlook regarding the role of the state in the economy included the following interrelated components. First, a decline in social cohesiveness and increasingly evident divisions of interests were accompanied by a demise of a belief in a harmonious common interest that unified the entire community. This growing skepticism applied especially to the confidence in the ability of government to reflect such a common interest through selective ad hoc choices in its name. The dominant conclusion was not always that government should abstain from "intervening" or be kept out of the economic sphere altogether. Jacksonians are often described as radical individualist and ardent supporters of laissez faire. More nuanced accounts usually highlight divisions and differences in this respect among different factions of the Jacksonian movement. One way or another, laissez faire was not the order of the day

¹⁰¹ Lee Benson's analysis of New York's local politics demonstrates the breadth and looseness of what I call the "Jacksonian outlook." According to Benson in New York's local politics it was Whigs who led the attack against state charters and monopolies and used it to bash the faction of the Democratic Party that was in power. Only after facing heavy criticism and rising anti-monopolistic sentiment did the Democratic Party in New York change direction and formulate its own anti-monopolistic platform. LEE BENSON, THE CONCEPT OF JACKSONIAN DEMOCRACY: NEW YORK AS TEST CASE 93-97 (1961).

¹⁰² Schieber, *supra* note 77, at 136; Handlin & Handlin, *supra* note 77, at 182-202; Lawrence Frederick Kohl, The Politics of Individualism: Parties and the American Character in the Jacksonian Era 133-144 (1989).

¹⁰³ Handlins & Handlin, *supra* note 77, at 229-244.

¹⁰⁴ See Kohl, *supra* note 102, at 115-133; Benson *supra* note 101, at .105-109.

¹⁰⁵ For a more complex picture of the Jacksonians, in this respect, see for example: MICHAEL J. CONNOLLY, CAPITALISM POLITICS AND RAILROADS IN JACKSONIAN NEW ENGLAND (2003); Novak, *supra* note 78, at 43; Carl E. Prince & Seth Taylor, *Daniel Webster, The Boston Associates And the U.S. Government Role in the Industrializing Process* 1815-1830 in ESSAYS FROM THE LOWELL CONFERENCE ON INDUSTRIAL HISTORY 1980-1981 106 (Robert Weible et al eds. 1981).

in antebellum America. Generally, government was still assigned an important role in fostering economic growth and in actively creating facilitative conditions for it. 106 The more widely influential ideological change was, rather, opposition to special and selective encouragements. This was closely related to a more general strong opposition, with older roots, to special and class legislation. Special privileges came to be seen as particularly pernicious. They were identified with favoritism and corruption and were often labeled as attempts to create an aristocracy of the few. 108 There was also an egalitarian, or rather formal equality of opportunity, aspect to this view. In allocating economic benefits and burdens, the common argument went, government had to act in general and impartial ways that offered opportunities equally open to all. 109 Finally, there also gradually appeared, an initially soft form, of a public/private distinction. 110 From this perspective government had the right and the responsibility to foster economic prosperity but it had to do it while restricting itself to the proper sphere and forms of public power. This meant, on the one hand, that government could not be directly and selectively involved in the private aspects of enterprise. On the other hand, it also meant that government could not abdicate, bargain away or delegate to private parties its public powers and responsibility to regulate. 111

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The classic work making this argument is WILLARD HURST, THE CONDITIONS OF FREEDOM IN NINETEENTH CENTURY UNITED STATES (1961). See also WILLARD HURST, LAW AND ECONOMIC GROWTH: THE LEGAL HISTORY OF THE LUMBER INDUSTRY IN WISCONSIN, 1836-1915 (1964); Scheiber, *supra* note 89, at 132; Benson, *supra* note 101, at 13-14. In party politics terms, however, Benson associates this new synthesis of the liberal police state with Whig ideology and describes Jacksonians as espousing ardent laissez-faire views. *Id.*, at 105-109, 220-222. While the Democratic Party included many factions such a sweeping assertion is at least somewhat controversial.

¹⁰⁷ Fisher, *supra* note 85, at 370-371.

¹⁰⁸ ARTHUR M. SCHLESINGER JR., THE AGE OF JACKSON 23-26, 306-321, 334-339 (1945); Watson, *supra* note 100, at 34-35; .Kohl, *supra* note 102, at 215.

¹⁰⁹ Fisher, *supra* note 85, at 370.

Kohl, *supra* note 102, at 108-115. Kohl, however, too quickly and uncritically identifies the public/private distinction with laissez faire views.

¹¹¹ Hartz, *supra* note 77, at 79-81.

The practical outcome of the rise of the Jacksonian outlook was a decline of the extensive use of special privileges and encouragements and their replacement by standardized, universal regimes. Again corporations were the most conspicuous example. Corporate charters that were the most important and salient instance of special privileges declined in a long and gradual process. They were gradually replaced by general incorporation regimes. The first wave of general incorporation statutes came in the 1840s. 112 These statutes transformed incorporation into a standardized right open on an equal basis to all. These early regimes were limited, however. Some were hybrids applying general incorporation only to some economic areas, while in many places a dual system of general incorporation and individual grants persisted for a long time. Moreover the early general incorporation statutes laid heavy restrictions and created numerous ways in which government limited and regulated corporate activity (on a general equal basis). ¹¹³ Only late in the century there appeared a move toward general incorporation regimes that also minimized governmental regulatory involvement or restrictions. 114 Willard Hurst identified the ideological change involved with this process in terms that correspond exactly to the shift from the commonwealth to the Jacksonian outlook. The legitimacy of corporations, Hurst explained, shifted from being rooted in some specific public service each of them performed, to the general utility of the regime as a whole. 115

The decline of the commonwealth style of government and the rise of the liberal state is directly relevant to one of the three major patterns of the development of patent and copyright. The transformation of these legal fields from ad hoc privileges into general rights is closely related to the political, administrative and ideological changes associated with the early appearance of the liberal state. On the most general level these two stories seem to overlap substantially. The early colonial and state grants of patents and

¹¹² One isolated and limited early forerunner was a1811 New York statute that created general incorporation within certain manufacture fields. See Seavoy, *supra* note 96, at 9-29.

For a summary of the heavy regulatory nature of early general incorporation statutes see: Jonathan Jacob Chausovsky, The Statutory Foundations of Corporate Capitalism, 1865-1900: States and the Law in the Formation of the American Political Economy (Ph.D. diss. 2005), Chapter 3.

¹¹⁴ Seavoy, supra note 96.

¹¹⁵ WILLARD HURST, THE LEGITIMACY OF THE BUSINESS CORPORATION IN THE LAW OF THE UNITED STATES 1780-1970 (1970).

copyright conformed exactly to the institutional forms characteristic of the commonwealth government. The later nineteenth century general rights regimes governing these legal fields were exactly the sort of framework that stood at the heart of the Jacksonian outlook.

In the commonwealth framework government was conceived of as having both the right and duty to actively intervene in social and economic life in order to promote the public good or the community welfare. This function was often carried out not through universal regulatory regimes but rather through the use of selective ad hoc privileges, powers and "encouragements" granted to individual parties. Early colonial and state patent grants corresponded exactly to this ideology and institutional form. They were granted as part of government's exercise of its power in this field in the name of the public good. Such grants were not based on a general regulatory regime that defined universal rights and standard entitlements. Instead, they were created on a discretionary and ad hoc basis, requiring an affirmative expression of the political will of the community in each case. The grantee would offer a specific social benefit in the hope of convincing the representatives of the community to grant a tailored set of privileges. 116 The representative of the community would then weigh the public good and decide whether and what kind of privileges to grant. These grants were the exact equivalents of corporate charters and other individual privileges characteristic of the commonwealth style government.

The later evolution of patent and copyright closely tracks the rise of the liberal state. The institutional form of universal standard rights that took over these fields was characteristic of the ideological shift associated with the move to the liberal state. Special privileges and class legislation gradually lost their legitimacy and came to be seen as instances of favoritism and corruption. The conception of government as representing a cohesive and uniform public interest waned. Many still expected government to aid and foster economic growth, but the legitimate form of such activity was increasingly seen as general uniformentitlements open to all on an equal and universal basis. The transformation of patents and copyrights followed closely the route of other special privileges characteristic of the commonwealth age. Such privileges, most prominently corporate charters, decayed and disappeared. They were replaced by universal regimes of general rights epitomized by the general incorporation statutes.

¹¹⁶ See Chapter 1, sec. II; Chapter 2, sec. II.

On a more specific level, however, there are two aspects of the evolution of patents and copyrights that require discussion in this context. The first is the very early decline of the strong privilege form in these fields. The second is the gradual continuing development toward a purer model of general rights during the nineteenth century, even after this earlier shift.

b. The Early Decline of Privileges

The early decline of the privilege form in the context of patent and copyright seems to be, at least at first blush, a major discrepancy between the two stories. The legal fields discussed in this work abandoned the pure special privilege form very early on. This happened well before the decline of corporate charters and at a time in which, according to the standard narrative, the commonwealth style of government was at its prime. By the early 1790s both copyrights and patents were no longer based on ad hoc legislative or executive grants. The shift occurred slightly earlier and was more pronounced in the case of copyright. Individual legislative grants were never adopted as the norm in either field on the federal level. Between 1790 and 1793, however, patents were granted as ad hoc, though rather standardized, executive privileges. 117 Even when in 1793 this system was supplanted by the registration regime patents remained closer to the privilege form. General registration was ambivalent and left open at least at first, the possibility that courts might function ex post as a diluted version of a discretionary granting institution. In copyright law, general statutes appeared in the states as early as the 1780s, although parallel individual grants persisted. The 1790 move to a federal regime was marked by a clear shift to a general rights framework. There is a twofold puzzle here. First, the early transformation of patents and copyright has to be explained by comparison to the much later decline of the commonwealth style and its institutional forms. Second, there is the question of the internal differences between patents and copyrights.

There seem to be two relevant factors for explaining these puzzles. The first is the fact that since 1790 patent and copyright became federal regimes. There is little indication that at the time it happened the move to the federal level was seen as involving special ideological problems, at least any problems that were fundamentally different than state grants. The common

¹¹⁷ See Chapter 4, sec. A(1).

¹¹⁸ Jefferson's early famous objections to the power to grant monopolies were made in the context of federal power, but there is little to suggest that he saw

drive behind the demand for federal protection and its main justification was apprehension of the opportunities of a national market and of the problems involved with federalism in this context. The saga of the steamboat inventors, who competed and tried to out-lobby each other in the various states, was a dramatic exemplification of both the opportunity of a national market and the problems of regional control. Nevertheless, the move to the federal level had important long-term implication, even if they were not initially contemplated or planned. It placed the two fields in a significantly different environment in terms of common practices and general popular attitudes.

The commonwealth style of government was more characteristic of the state and local government than of the federal one. This is not to say that there were no strong currents that envisioned an active and broad role to the federal government in fostering economic growth, or that applied to it the traditional mercantilist outlook. ¹²⁰ In modern terms, the early nineteenth century federal government often acted and legislated in an interventionist or protectionist ways. ¹²¹ The point is that the specific institutional forms of ad hoc discretionary legislative and executive privileges were much more characteristic of the states, where they enjoyed a long township and colonial tradition. The federal government did not have such an institutional tradition and the use of such devices there was much less ubiquitous. ¹²² Corporate

a fundamental difference of principle between state grants and federal grants. About Jefferson's early objection see EDWARD C. WALTERSCHEID, TO PROMOTE THE PROGRESS OF USEFUL ARTS: AMERICAN PATENT LAW AND ADMINISTRATION 1798-1836 55-57 (1998).

¹¹⁹ See F.D. Prager, *The Steamboat Pioneers Before the Founding Fathers*, 37 J. Pat. Off. Soc. 486 (1955).

One obvious example is Alexander Hamilton, his proposals and the views of which he was one of the more eloquent representatives. See ALEXANDER HAMILTON, REPORT OF THE SECRETARY TO THE TREASURY OF THE UNITED STATES ON THE SUBJECT OF MANUFACTURES (1791).

¹²¹ See Scheiber, *supra* note 96, at 132; Curtis P. Nettels, The Emergence OF A NATIONAL ECONOMY 1775-1815 109-129 (1962).

¹²² Scheiber, *supra* note 77, at 136; Handlin & Handlin, *supra* note 77, at 61; Watson, *supra* note 100, at 61.

charters, for example- the flagship of state's special privileges- did not exist on the federal level as a matter of routine. 123

On the ideological level too the federal government faced more suspicion and skepticism early on. The commonwealth concept rested on a fundamental belief in a joint public good grounded in relative social cohesiveness, what the Handlins called "the primordial concept of common interests." This attitude was obviously much reduced if not absent altogether on the national level. John Lauritz Larson described how in the context of "internal improvements" early excitement over the possibilities opened up by the new federal government and a "dream of harmonious interests centered on the Potomac" quickly gave way to a reality of "[m]utual suspicion, rooted in partisan and sectional differences" and "fault lines of jealousy." Again, this is not to say that the federal government acted or was expected to act anything like a night-watchman state. It does mean, however, that specific institutional mechanisms characteristic of the commonwealth met earlier on much more suspicion and resistance on this level. 127

When they became federal regimes patent and copyright were hurled into this context of lack of an institutional tradition and a weaker ideological support for the ad hoc privileges institutional form. Another increasingly problematic aspect of the traditional legislative privileges system that may have been exacerbated by the move to the national level was the sheer

The first and second Banks of the United States and the debates surrounding them should be thought of in this context as exceptions that exemplify the rule and as demonstrating the more suspicious attitude toward ad hoc governmental grants on the federal level.

¹²⁴ Handlin & Handlin, *supra* note 77, at 130, 186-191 (explaining that the later decline was caused by the weakening of "the belief in common interest on which had rested the old Commonwealth concept."); Scheiber, *supra* note 77, at 136.

 $^{^{125}\,}$ John Lauritz Larson, Internal Improvements: National Public Works and the Promise of Government in the Early United States 20 (2001).

¹²⁶ *Id.*, at 49. See in general *id*, at 9-70.

Watson, *supra* note 100, at 61-61. On the close connection between the two ideals of the well regulated society and that of *local* self-government see: Novak, *supra* note 78, at 10-11, 237.

volume of the petitions and decisions involved. In the early days, between the empowering constitutional clause and prior to the legislation of the first patent and copyright acts Congress was practically flooded with individual petitions for both patent and copyright grants. These petitions reveal that everybody simply assumed that the old legislative privileges patterns would be followed. After all, why wouldn't they? These petitions prayed for special enactments in the vein of the colonial and state tradition. It is possible, however, that this early episode supplied a vivid demonstration of how impractical it would be for Congress to follow the familiar pattern and regularly deal with a multitude of individual protection petitions from the entire nation. When, possibly under the effect of this demonstration, Congress opted for general legislation the ideological and the lack of institutional tradition issues began to exert their effect, more so regarding copyright than patents.

The second factor that also helps to explain the internal differences between copyright and patent is the existence of a prior detailed institutional tradition and practices in these fields. Americans were not operating in a vacuum in 1790 and later. As the two first chapters demonstrated they had a rich and detailed tradition to draw on. It was derived both directly from the English origins and from the colonial and state legacy. These legacies were empowering. They supplied familiar tools and practices that could be used and gradually reworked to deal with changing needs and demands. They were also constitutive. They partook in shaping future developments and channeled their direction.

By 1790 there were strong preexisting traditions in these fields of ad hoc privileges. The freshest and strongest ones were the legislative grants of the states. Yet there were also other established structures that already pointed in other directions. There already existed, both in England and the states, institutional frameworks and practices that moved toward general rights. In this respect there was a historically contingent, but nonetheless significant, difference between patent and copyright. In the field of copyright there existed the precedent of the Statute of Anne and of the state general copyright statutes that followed in its footsteps. The fact that the Statute of Anne constituted copyright as a general rights regime was an historical contingency. It was the product of the peculiarities of seventeenth and eighteenth century England. When the statute was created in 1710 it was in the context of more than a century-old tradition of the stationer's copyright.

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See Chapter 3, sec. A; Chapter 4, sec. A(1); BRUCE W. BUGBEE, THE GENESIS OF AMERICAN PATENT AND COPYRIGHT LAW 131-142 (1967).

Within the guild apparatus and administrative practices copyright was shaped as a standardized and routine entitlement. Moreover, an ambiguous latent understanding of copyright as a universal standard right had emerged in the company's context. ¹²⁹ In addition by 1790 there was in England a vibrant and relatively large book trade whose members were accustomed to the registration of copyright as a matter of routine business practice. When a new regime was created in 1710 this expected broad demand together with the deeply rooted practices and traditions in the field pointed in the direction of a general regime, as indeed happened.

The framework that was shaped by the contingencies of the English context worked in mysterious ways decades later in America. When after independence a new consciousness of authorship arose and a lobby for state encouragement for authors was formed, the English framework was an important precedent that could be used. Many of those who tried to lobby for authors protection explicitly pointed at the Statute of Anne. 130 When state legislatures favorably responded to the agitation they were content to simply fall back on this readymade institutional framework. The state statutes were all miniature versions of the Statute of Anne with various degrees of modifications. 131 During the state copyright era, however, things remained ambiguous. The states' regimes were characterized by duality as individual legislative grants persisted parallel to the general statutes. Thus at the eve of the federal regime there were already two sets of institutional traditions on which to draw. When Congress tried to handle the problem of protection to authors and when the impracticability of individual legislative grants on the federal level became apparent, it naturally turned to those traditions. The Statute of Anne and the state statutes were the obvious solution. The federal statute closely tracked their general pattern. 132 Thus it had the general character of a universal right regime.

The story of patents was somewhat different. At the eve of the federal regime there appeared a general rights patent regime neither in England nor in the states. The state practice, one practically negligible incident in South Carolina notwithstanding, was deeply rooted in the ad hoc legislative grants tradition. ¹³³ The English legacy was more ambivalent. By the late eighteenth

¹²⁹ See: Chapter 2, sec. I(A)(2)(b).

¹³⁰ See Chapter 2, sec. II(B)(2).

¹³¹ *Id*.

¹³² See Chapter 3 sec. A(1).

¹³³ Chapter 1, sec. II.

century there appeared a widening rift there between formal legal concepts and administrative practice. As far as the former was concreted patents were ad hoc discretionary privilege grants. But in practice patents were usually issued as a matter of routine, the content of the grants and of conditions for their validity were standardized and mechanisms for review of patents on the basis of social policy considerations decayed. While for jurists patents remained the traditional privileges they always were, practices and first signs of conscious ideology started treating them as general standardized rights. Again this was the outcome of the peculiarities of the English context. The ambiguous situation was brought about mainly by a growing governmental disinterest in monopoly patents and the internal inertia of the grant system that created a slow corrosive effect for almost a century.

When Americans created their first general patent regime and decided to abandon the most familiar form of legislative grants it seems that again they turned to the English framework. Unlike copyright, however, the English institutional tradition here was much more ambiguous at the time. Paradoxically the 1790 American regime was closer to the early English origins of patents than to the English framework of the time. The 1790 framework was modeled on the de jure situation in England. It constituted patents as ad hoc discretionary executive grants. 135 When after a few years the system collapsed under the burden of petitions, a new registration regime was put in place. This time the basic pattern of the regime followed the situation de facto in England. Patents were now granted ex ante with no discretion at all, while the question of whether ex post review would treat patents as specific privileges or as general standard rights remained open. This was a step toward a general rights regime. Moreover, some explicit ideological support for such a framework began to appear. Nevertheless, at least initially things remained ambiguous and fluid in this respect. ¹³⁶

Thus both the early divergence from the commonwealth tradition of patent and copyright and the difference between these two fields are illuminated by the combination of the move to the federal level and the use of preexisting institutional frameworks. The shift to the federal level produced practical and ideological difficulties. On the practical side the sheer scale of a national system made the old legislative grants an impracticable option. Moreover, such grants of privileges lacked a supporting tradition on the

¹³⁴ Chapter 1, sec. I(C)(4)(b).

¹³⁵ Chapter 4, sec. A(1).

¹³⁶ Chapter 4, sec. A(2).

federal level and were much more likely to encounter ideological resistance there. Preexisting English and state institutional frameworks offered alternatives to which legislatures could turn. The differing character of these frameworks shaped the early form of the patent and copyright regime and the difference between them.

c. The Later Shift to General Rights

The second aspect of copyright and patent that must be elaborated in the context of the shift from the commonwealth to the liberal state is their later development in ways that were strongly congruous with that shift. The crucial fact here is that, despite the earlier transformation of patents and copyright, the process was not complete by the end of the eighteenth century. While the pure privilege form declined early in these fields, they did not immediately become unequivocally based on the institutional form of general rights characteristic of the liberal state. At least on a secondary level, conflicts and a gradual transformation would continue to take place well into the nineteenth century. As we saw, this phenomenon was more pronounced in the field of patent, but even copyright still experienced some rearguard protracted battles of this sort. On this secondary level the continued transformation of patents and copyright dovetailed precisely with the decline of the commonwealth and its institutional forms such as corporate charters.

In patent law this secondary transformation from ad hoc privileges into rights occurred mainly in the context of the changing utility requirement and the concept of the patent regime embedded in it. In copyright the last vestiges of the privilege framework survived and declined gradually in the context of originality and subject matter requirements. It is not incidental that these doctrinal areas occupied a prominent place also in the previous section that dealt with developing notions of market value within patent and copyright law. The rise of the market concept of value and the decline of commonwealth style privileges were closely related. In the older framework the notion of intrinsic value was often intertwined with that of community authority. The discretionary choices of a small governmental elite were legitimate because they could be seen as guided not merely by private interests or preferences, but rather by an objective public good. The intrinsic value of an invention or a book was seen as measured by the common good of the community.

When under the pressure of the Jacksonian outlook special privileges came to be seen as instances of corrupt favoritism and when governmental ad

hoc choice came to be portrayed as elitist attempts to preserve an aristocracy of wealth, a potential conceptual vacuum was created. If government representing the community was not the proper mechanism for assessing value and allocating reward, what was? At this point exactly "market value" entered the picture. The market came to be seen as the only proper and just mechanism for determining value and allocating reward. Ironically, a mutated form of the idea of the community as the allocator of reward, characteristic of the commonwealth, survived in this new market outlook. Market value was the summation of individual preference, which in turn was seen as the preference of the "public." Thus it was often explained that the great virtue of general rights was that the inventor or the author received compensation in exact proportion to the value the public imputed to their creation. The crucial difference was, of course, that the former "community" and the notion of a common public good attached to it was replaced by the "public," as a summation of the preferences and interests of atomistic individuals. General rights and market value were, thus, close correlatives, supporting and defining each other.

In patent law it was the development of the utility requirement that embodied the ongoing move from privileges to general rights. As explained, the move to a registration regime in 1790 deferred to the courts the ultimate question of the character of the regime. Doing away with any prior examination or discretion precluded, of course, the prior frameworks of either legislative or executive commonwealth style grants. Some even employed the rhetoric of general rights to characterize the move. But ultimately courts were left, with almost no guidance, to determine the character of the regime through their ex post review of patents- the only stage in which any substantive scrutiny was applied. Although the institutional character and self-ethos of the courts tilted the balance right from the start, at least some judges were willing to see themselves as stepping into the governmental shoes left empty by the other branches and assuming the role of substantive evaluation of inventions in the name of the public. This was the underlying assumption of Judge Van Ness' elaboration of the "discretionary power" of the judge in McGaw v. Bryan ¹³⁷ and of J.R. Infersoll's claim that the 'jury are substituted for the board, which, under the first law, was to decide whether the supposed invention was 'sufficiently useful and important' for a patent."138

¹³⁷ 16 F. Cas. 96, 99 (S.D.N.Y. 1821).

¹³⁸ Evans v. Eaton, 16 U.S. 454, 488 (1818).

Not all agreed, of course. The main battleground over whether judges would function as ad hoc discretionary evaluators of the public good or as mere enforcers of general standardized criteria was the utility requirement. The early Story opinions which became the foundation of the minimalist concept of utility were permeated by the notions of general rights and the liberal state. Beginning in 1814 Story worked to establish the rule that considerations of relative utility were irrelevant as long as the invention at issue was not completely immoral of frivolous. 139 His refusal to allow any assessment of relative utility corresponded to the rejection of government as the evaluator of objective utility in the name of the public good. The alternative he described was, of course, reward allocated by the forces of public demand. Even his qualification that patents for utterly "mischievous or immoral" inventions were invalid was part of the new understanding of government's proper role. This last part expressed the emerging public/private distinction. As long as questions of relative utility were concerned determination was to be left to the forces of the private sphere. When the line of total immorality was crossed, however, public power wielded by judicial hands had both the right and the duty to step in and regulate.

The gradual decline of the conservative view of utility and the rise of the Story line was marked by the steady strengthening of the Jacksonian outlook. The new 1836 patent regime was a landmark in this respect. The general framework of the new examination system reflected the tenets of the liberal state. The role of both the examining officers and of courts in this new regime was not to make discretionary evaluations according to a public interest yardstick but rather to certify the fulfillment of standard universal criteria. Patents became unequivocally standardized rights open to all on a general and equal basis. The Jacksonian outlook spirit animating the 1836 act was apparent. The Senate committee report written by John Ruggles, was one of the clearest examples of the penetration of the Jacksonian outlook to patent law. "Patronage," Ruggles wrote, "is necessarily partial in its operation." The report, it will be remembered, recommended "a general law to secure to all descriptions of persons, without discrimination, the exclusive use and sale, for a given period of the thing invented." This was

¹³⁹ Chapter 4, sec. A(3).

¹⁴⁰ See Steven Lubar, *The Transformation of Antebellum Patent Law*, 32 Tech. & Culture 932, 941–42 (1991).

¹⁴¹ John Ruggles, Select Committee, *supra* note 56, at 855.

¹⁴² *Id*.

exactly the vision of general rights as the proper institutional 6rm of the liberal state.

Although it was first published a decade later, the Scientific American magazine was one of the strongest voices elaborating this view of the patent regime. The magazine relentlessly preached for uniform standards and for the elimination of any hint of discretion in the work of the Patent Office. In 1850, it declared "[w]e like impartiality, system and fair dealing in every respect We care not who the applicant is, let him be Jew or Gentile," and demanded "uniform rules and regulations for *all cases* in the Office." ¹⁴³ Half a century earlier in 1787 Tench Coxe could seriously propose a system of "[p]remiums for useful inventions and improvements" including "liberal rewards in land, 144 It was a different story, however, when in 1850 a reader of the Scientific American proposed that regarding each invention "[a] corps of scientific and practical examiners at Washington should decide upon its utility and pay the inventor or his representative for the same, out of a fund created for that purpose, and make the same public at once." ¹⁴⁵ In 1852 the Scientific American reacting to a wave of such proposals remarked that "such persons know not what they talk about" and warned that they "may deceive the people with their sophistry." Two months earlier, dealing with the same subject, it announced:

This system of committee caballing and maneuvering, to lighten the pockets of Uncle Sam, and to get special monopoly privileges we do detest. Give us broad just and workable laws, and let them be carried out faithfully—none of your special systems, where favors are sought for

¹⁴³ Patent Office and Reform of the Patent Laws, 5 Sci. Am. 317 (1850).

¹⁴⁴ See Edward C. Walterscheid, *To Promote The Progress Of Science And Useful Arts: The Background And Origin Of The Intellectual Property Clause Of The United States Constitution*, 2 J. of Intellectual Property Law 1, 39-40 (1994). The earlier draft of the patent and copyright constitutional clause also included references to "proper premiums and provisions" and to "rewards and immunities." *Id.*, at 44-45. It is hard to know why exactly such plans were not adopted, but the most reasonable reason, as Walterschied suggests, was probably concerns over cost.

¹⁴⁵ H. Baker, Parker's Reaction Water Wheels, 5 Sci. Am. 315 (1850).

¹⁴⁶ The Benefits of Patents, 7 Sci. Am. 293 (1852).

and obtained by particular parties in a particular manner."¹⁴⁷

After 1836 The Story minimalist interpretation of utility continued to displace the broader view until by the Civil War it was completely triumphant. In the last quarter of the century even the zone that Story carved out for public regulation within patent law was in constant retreat .Just as general incorporation regimes lost their former regulatory character, utility became a shrunk and exotic doctrinal periphery of patent law with little practical bite. To a large extent even the public regulatory power of the state was pushed out of patent law. It did not necessarily disappear. Sometimes the argument was that regulation should be taken care of "elsewhere" in the public regulation areas of the law. Patent law, however, was left only with a small periphery of its former regulatory aspect. As for the commonwealth notion of government, by the last part of the century any hint of ad hoc governmental weighing of public costs and benefits in this context became an anathema. As Albert Walker explained in his treatise "balancing the good functions with the evil functions" of inventions could never serve as a criterion for the validity of patents. 148

In copyright law the early shift to general rights was more sweeping. Nevertheless limited pockets of the notion that legal protection depended on some rough estimation of the benefits offered to the public good survived. This was apparent mainly in the use of the emerging originality doctrine and of subject matter categories to deny protection to certain classes of works. 149 Commonwealth ideas of government were much diluted in this context. Under the federal copyright regime, there appeared no serious argument that the eligibility of works for copyright protection had to be determined on the basis of governmental evaluation of the substantive value of each work. Nevertheless, originality and subject matter doctrines were used in order to deny protection to general categories of works deemed as lacking any social value. The 1829 Clayton v. Stone that denied protection to a price catalogue set the tone of this approach by explaining that "[t]he title of the act of congress is for the encouragement of learning... and was not intended for the encouragement of mere industry, unconnected with learning and the sciences." Some courts carried on this line till the very end of the century

¹⁴⁷ Government Rewards for Discoveries, 7 Sci. Am. 221 (1852).

¹⁴⁸ Walker, *supra* note 59, at 65.

¹⁴⁹ See Chapter 3, sec. C(4)(b).

¹⁵⁰ 5 F. Cas. 1000 (S.D.N.Y. 1829).

explaining that "[t]o be entitled to a copyright the article must have by itself some value as a composition, at least to the extent of serving some purpose other than mere advertisement" or that copyright protection was limited to works where it could "stimulate original investigation whether in literature, science or art, for the betterment of the people." 152

Again it was Story's early formulation that insisted on abandoning any such vestiges of the notion of conditioning protection on the crossing of some substantive value or public benefit threshold. Story's turn to market value- to the principle that any producer of a text was entitled to copyright "valere quantum valere potest" was also an implicit rejection of any governmental discretionary role in evaluating value. The role of government from this perspective was to create a general standardized regime open to all and refrain from any ad hoc evaluations of merit.

The steady displacement of the more conservative *Clayton* line by the Story model¹⁵⁴ expressed, among other things, the disappearance of any vestiges of commonwealth thinking. The 1903 *Bleistein v. Donaldson Lithographic Co.*¹⁵⁵ where Holmes deployed his highly influential aesthetic neutrality manifesto was the last nail sealing the coffin of such remnants from the past. By the end of the nineteenth century judicial abdication became the unquestioned stance regarding questions of substantive value in copyright law. Notions that protection had to be limited only to such instances where the public interest was served disappeared altogether to be replaced by a market value criterion.

3. Authorship and Inventorship

The third contextual story was already alluded to in passing in various parts of this work. This is the narrative of the rise of the modern ideology of the original author and its (mostly absent) twin- the story of the modern concept of the genius inventor. As will become apparent, the existing relevant body of scholarship is already preoccupied, indeed obsessed, with the

¹⁵¹ Higgins v. Keuffel, 140 U.S. 428, 431 (1891).

¹⁵² J.L. Mott Iron Works v. Clow, 82 F. 316, 319 (7th Cir. 1897).

¹⁵³ Emerson v. Davies, 8 F. Cas. 620-621.

¹⁵⁴ Chapter 3 sec. (4)(b)

¹⁵⁵ 188 U.S. 239 (1903).

connections between the social construction of these ideological concepts and intellectual property law. My analysis strategy will be, therefore, somewhat different than that of the two preceding sections. I will not simply sketch the connections between the structural-doctrinal transformation surveyed in this work and an existing body of contextual scholarship. Instead, I will use the former to illuminate some troubling shortcomings of the latter and to suggest some preliminary revisions and modifications to alleviate these problems. ¹⁵⁶

a. The Rise of Original Authorship: The Standard Narrative

Beginning in the late 1980s there appeared an elaborate and insightful body of scholarship that, often inspired by Foucault, 157 traced the genesis of the modern concept of the original author in Western culture. No brief summary can do justice to this rich and diverse strand of research, but the narrative is roughly as follows. During the seventeenth and eighteenth centuries there gradually appeared in England and Europe a new socially constructed conceptual scheme of the creative process, of the producers of texts and of the relationship between such texts and their producers. Compared to earlier times, this new conceptual scheme was much more individualistic. It was individualistic in two related senses. First, it privileged, to an unprecedented extent, the status of one individual, who would become known as the "author." The individual writer of a text was singled out and sharply distinguished from all others involved in its production and was assigned the status of the ultimate origin of the text. 158 A new unique and privileged relationship came to be postulated between the "work" and its sole the activity of authorship the author. Second. reconceptualized as a highly individualistic one, ignoring or obscuring the collaborative and cumulative aspects of creation. At the extreme, the author

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¹⁵⁶ For a more elaborate development of this argument see: Oren Bracha, *The Ideology of Authorship Revisited* (unpublished manuscript, 2005).

¹⁵⁷ Michel Foucault, *What is an Author?* in TEXTUAL STRATEGIES: PERSPECTIVES IN POST-STRUCTURALIST CRITICISM (Josue Harari ed. 1979).

Martha Woodmensee, *The Author Effect I*, in The Construction of Authorship: Textual Appropriation in Law and Literature 16 (Martha Woodmansee & Peter Jaszi eds. 1994); Woodmansee, *supra* note 4; James Boyle, Shamans, Software, and Spleens: Law and the Construction of the Information Society 54 (1996).

was represented as creating in perfect isolation and the work was seen as totally attributable to one direct personal origin. 159

Another key component of the new scheme was the concept of originality. The true author came to be conceived of as radically original in two intertwined ways. The new notion of originality involved a strong connotation of self-sufficient independence that was yet another incarnation of the idea that the author is the sole and ultimate origin of the work. It also meant novelty, that is to say, original works were understood as being completely new and different from those already in existence. Originality in this sense was marked with a supposed total break with traditions and existing materials as opposed to their reproduction, reworking or development. The status of the idealized author vis-à-vis his work was thus equalized to that of *the Creator* and his *Creation*. It was the status of a creator ex-nihilo of utterly new things.

Three methodological underpinnings of this narrative are worth highlighting: ideology as social construction, ideology as mystification and law as the site of ideological reproduction.

First, original authorship is usually described as ideology, in the sense of being a contingent social construct. ¹⁶¹ The described conceptual scheme did not simply elaborate and reflect the order of things in the world, the "real" or the "natural" relationship between texts and their producers. Instead, it arbitrarily privileged certain attributes and relations while excluding others. ¹⁶² Individual authorship was simply the highly contingent and unique way in which a particular society at a particular time happened to come to imagine and conceive of the "genuine" act of creation. ¹⁶³

¹⁶¹ On ideology as a social construct see: TERRY EAGLETON, IDEOLOGY: AN INTRODUCTION 3-5, 28-31(1991).

¹⁵⁹ Boyle, *supra* note 158, at 54.

¹⁶⁰ *Id.*, at 56-57.

¹⁶² Foucault, *supra* note 157.

¹⁶³ Martha Woodmansee & Peter Jaszi, *Introduction*, in THE CONSTRUCTION OF AUTHORSHIP: TEXTUAL APPROPRIATION IN LAW AND LITERATURE 3 (Martha Woodmansee & Peter Jaszi eds. 1994); Jaszi, *supra* note 4, at 455, 459, 466 (1991); Boyle, *supra* note 158, at 56.

Second, original authorship is also described as ideological in the sense of being deceptive or at least mystifying. ¹⁶⁴ The point here is that the reality of authorship- the real practice of the creative process- had never overlapped with its new ideological representation. While the practices of creating texts certainly changed, they never came close to being anything like solitary individuals creating original works ex-nihilo. The creative process, to varying degrees in different contexts, has always been collaborative and cumulative, involving reworking of existing materials and meanings rather than originating completely new ones. It never entailed a sharp distinction between imitating, borrowing or adapting and creating new original ideas. ¹⁶⁵ Thus original authorship constituted a powerful false, or at least distorted representation of what was the actual reality of creation.

Finally, many of the works in this vein present the legal field as an important site where social ideology was produced and reproduced. While some of the descriptions occasionally have functionalist undertones-describing the law as merely reflective of and reactive to "social" changes ¹⁶⁶-the bulk of scholarship takes a different tack. It presents law-specifically copyright law- and other social fields of discourse as mutually constitutive. From this perspective copyright law did not simply change to reflect ideological social changes. Copyright law, rather was one of the main social fields of discourse and practice where the transformation occurred. ¹⁶⁷ Thus, in an important sense, copyright *was* the ideology of authorship.

This claim does not entail the imperialistic assumption that law was the only social field where the ideology of authorship was developed or that it

¹⁶⁴ For a critical discussion see: Eagleton, *supra* note 161 at 10-28.

¹⁶⁵ Woodmansee & Jaszi, Introduction, supra note 163, at 3-4.

¹⁶⁶ See e.g.: Woodmansee & Jaszi, Introduction, *supra* note 163, at 4-5 (describing the gradual extension of the copyright term in functionalist terms); Woodmansee, Author Effect I, *supra* note 158, at 27-28.

This is probably the most attractive interpretation of the work of most, if not all, scholars writing in the field, but the writers themselves are not always clear or consistent about their methodology. The scholar whose historical accounts most clearly and consistently adhere to this methodological perspective is Mark Rose. At times Rose even claims that in temporal terms, in England the development of notions of original authorship in legal discourse preceded the ascendancy of romantic notions in the literary field. Mark Rose, *The Author as Proprietor: Donaldson v. Becket and the Genealogy of Modern Authorship*, 23 Representations 51, 76 (1988).

determined all others. Sometimes writers and other agents created and reproduced the ideology of authorship in contexts that had little to do directly with the law. Yet, it turns out that much of the debates as well as the intellectual and conceptual interaction that shaped the ideology of authorship did happen within the legal field or in close relation to it. As we saw, many of the political arguments and even much of the theoretical writings that developed the concept of the author occurred in the course of participation in a debate over the existence and the shape of the legal regime that created and allocated entitlements in intellectual works. 168 This was the case from the moment that the trope of the author first appeared in the late seventeenth century lobbying efforts of the stationers; through the debates around the statute of Anne; 169 and most importantly in the context of the literary property battle. 170 Even when the individual agents of conceptual change were not directly engaged in the legal debate, they were often writing with at least one eye toward it. Notions of authorship were inextricably entangled with those of ownership and property. Other intellectual maneuvers that created and reproduced the ideology of authorship did happen in legal fora and texts or within the very heart of the legal field. The huge volume of theorization generated by these interactions in the form of counsel arguments, judicial opinions, Parliamentary speeches and learned pamphlets was a powerful melting pot that fused together legal doctrine, theories of property, and representations of the creative process.¹⁷¹ Blackstone and Mansfield were, thus, no less the creators of romantic authorship than Edward Young 172 or (later) William Wordsworth. 173

Moreover, the legal field was one of the main sites, though not necessarily the only one, where theoretical conjectures and speculations were transformed into social practices. Copyright law was not only an elaboration of a "theory" of authorship and ownership; rather it constituted and enacted this ideology as part of "everyday" social practice. ¹⁷⁴ In this sense, copyright

¹⁶⁸ See Chapter 2, sec. I(C)(2)(c).

¹⁶⁹ See Chapter 2, sec. I(C)(1)(a).

¹⁷⁰ See Chapter 2, sec. I(C)(2)(c).

¹⁷¹ See e.g. Rose, *supra* note 5; John Feather, Publishing, Piracy and Politics: An Historical Study of Copyright in Britain 11 (1994).

 $^{^{172}}$ EDWARD YOUNG, CONJECTURES ON ORIGINAL COMPOSITION (1759).

¹⁷³ William Wordsworth, *Essay Supplementary to the Preface*, in LITERARY CRITICISM OF WILLIAM WORDSWORTH 158 (Paul M. Zall ed. 1966).

¹⁷⁴ Rose, *supra* note 167, at 54.

law holds an especially important place in the creation and reproduction of the ideology of authorship. Copyright law *was* the ideology of authorship not just because that ideology was developed and elaborated within it. It *was* the ideology of authorship because copyright law was the main field of social practice where the new understanding of authorship received its actuality.

Less directly relevant to the historical analysis of authorship, but indicative of some of its problems, is a group of works that applies the historical insight to the present. At the hands of these writers the ideology of authorship ceased being an odd item from the past in the collection of the antiquarian and was insightfully transformed into a major explanatory force regarding contemporary copyright law. Oddly enough it is only at this late stage that patent law and the image of the genius inventor enter the picture. The historical narrative of original authorship has no real equivalent in the context of patent law. The social history of the construction of technology is still waiting to meet the legal history of patents. In existing patent scholarship a historical story of the emergence of the concept of the genius

¹⁷⁵ See e.g. Boyle, *supra* note 158; Keith Aoki, *Authors, Inventors and Trademark Owners: Public Intellectual Property and the Public Domain*, 18 Colum-VLA J.L. & Arts 1 (pt.1) & 191 (pt2) (1994); Peter Jaszi, Author *Effect II*, in The Construction of Authorship: Textual Appropriation IN LAW and Literature 16 (Martha Woodmansee & Peter Jaszi eds. 1994).

¹⁷⁶ The works of H.I. Dutton and Christine MacLeod deal with changing justifications of patents in public debate in Britain during the eighteenth and nineteenth century. They do not attempt, however to tell a story of the social construction of the concept of the inventor within legal discourse. See: H.I. DUTTON, THE PATENT SYSTEM AND INVENTIVE ACTIVITY DURING THE INDUSTRIAL REVOLUTION, 1750-1852 (1984); CHRISTINE MACLEOD, INVENTING THE INDUSTRIAL REVOLUTION: THE ENGLISH PATENT SYSTEM 1660-1800 (1988). In the American context, the work of Carolyn C. Cooper comes closest to analyzing this subject. Cooper's focus, however, is the construction of the concept of invention rather than that of the inventorthrough nineteenth century patent litigation. See: CAROLYN C. COOPER, SHAPING INVENTION: THOMAS BLANCHARD'S MACHINERY AND PATENT MANAGEMENT IN NINETEENTH CENTURY AMERICA (1991). Carolyn C. Cooper, Social Construction of Invention through Patent Management: Thomas Blanchard's Woodworking Machinery, 32 Tech. & Culture 960 (1991). Carolyn C. Cooper, A Patent Transformation: Woodworking Mechanization in Philadelphia, 1830-1856, in EARLY AMERICAN TECHNOLOGY: MAKING AND DOING THINGS FROM THE COLONIAL ERA TO 1850 (Judith M. McGaw ed. 1994).

inventor, similar to the copyright's author is, for the most part, assumed rather than developed. 177

The story of original authorship is very useful in illuminating the historical development of copyright law. Yet it also suffers from a few serious weaknesses. A good starting point for elaborating the latter is the link between the historical narrative and its application to modern copyright law. Often, this transition takes the form of tracing the historical development up to the end of the eighteenth century, when the modern framework of original authorship was supposedly complete, and leaping to the present in which it is assumed to still apply. Here is a typical example, by Martha Wodmansee:

"Our laws of intellectual property are rooted in a century-long reconceptualization of the creative process... Both Anglo-American 'copyright' and Continental 'authors' rights' achieved their modern form in this critical ferment, and today a piece of writing or other creative product may claim legal protection only insofar as it is determined to be unique, original product of the intellection of a unique individual (or identifiable individuals.)" ¹⁷⁹

You would never catch a lawyer arguing that. As demonstrated in Chapter 3, unless heavily qualified, the last part of this citation is simply wrong. ¹⁸⁰ Legal scholars writing in this field tend to be much more careful. Still, while being aware that the exact correlation thesis does not apply, they usually remain obscure regarding the exact relationship between authorship and modern copyright law or inventorship and patent law.

To a large extent, the problem is the temporal gap in our knowledge of the interaction between the ideology of authorship and the law. When most of the existing research ends at the end of the eighteenth century, it is all too tempting to assume a static continuity. Thus Mark Rose, at the conclusion of

¹⁷⁷ See e.g. Aoki, *supra* note 175, pt. 2; Boyle, *supra* note 158.

¹⁷⁸ Fisher, *supra* note 7, at 10.

Woodmansee, Author Effect I, *supra* note 158, at 27-28.

¹⁸⁰ It must be said in Wodmensee's defense that she is not a lawyer. The point, however, remains that when it comes to trying to apply the historical narrative of authorship to contemporary copyright law, the arguments of lawyers and non-lawyers alike often become either inaccurate and misleading or very ambiguous.

his excellent account of the evolution of the authorship-property ideology in eighteenth century Britain, informs us that "[b]y 1774, the year in which the Donaldson decision resolved the issue of the perpetuity, all the essential elements of modern Anglo-American copyright law were in place." ¹⁸¹ This is simply wrong as a factual observation and counterproductive as a methodological outlook. Hopefully, this work demonstrated the radical nineteenth century changes in copyright law. The point is that when the narrative ends at 1774, it is only natural to assume either that both copyright and the ideology of authorship remained static since then, or, more plausibly, that all later changes were the necessary elaboration or working out of the fundamental shift of the eighteenth century.

There are two unfortunate consequences to such an outlook. First it creates a skewed historical picture in which later changes are obscured or reduced to the mere logical consequences of earlier ones. Second, authorship scholarship runs into troubles the moment that the obvious inadequacy of the exact correlation assumption is pointed out, that is when one points out that modern copyright or patent law is far from an exact one-to-one reflection of the ideology of original authorship or inventorship. 182 When this happens the narrative of authorship runs the risk of being seen as, at best, dealing with an odd artifact from the past that has little relevance to contemporary law.

In what follows I attempt to provide a brief outline of the later history of authorship and inventorship in the context of the doctrinal changes describe in this work. This is, however, not a mere sequel. Through the outline of this later history I hope to provide a better understanding of the connection between the social ideology of authorship and inventorship and the legal field in a way that may illuminate the existing story and alleviate some of its problems.

b. The Narrative Revised: Authorship and Inventorship in Nineteenth Century America

Like capitalism and laissez faire, the romantic image of the original author and the American obsession with inventor-heroes did not arrive with

¹⁸¹ Rose, *supra* note 5, at 132.

¹⁸² For this critique of original authorship scholarship see: Mark Lemley, Romantic Authorship and the Rhetoric of Property, 75 Texas L. Rev.873 (1997).

the first ships. In this respect, the titles of two seminal works on these respective fields are indicative: Grantland Rice's *The Transformation of Authorship in America*, ¹⁸³ and Neil York's *Mechanical Metamorphosis*. ¹⁸⁴ The modern ideological images of the author and the inventor hardly existed in early colonial days. They emerged gradually only in the late eighteenth century and came into full bloom around and after the Revolution.

As for authorship, Rice argued that during the eighteenth century there occurred a "dramatic shift" in "the very meaning of public writing" in America. On the most basic level independent public writing transformed from an activity "vigorously suppressed" to being "estimable" by the time of the early Republic. It was, however, also the dominant image of what public writing was that changed. Until the second part of the eighteenth century public writing was not strongly associated with creative authorship in the modern sense. Printing presses were rare in the colonies and they were heavily regulated. To the extent that literary publishing in the modern sense occurred it was often through the London publishing centers rather than locally. The bulk of materials printed in the colonies were not literary works, but rather such works as sermons and other theological texts, government proclamations or proceedings and political writings. It was only during the second half of the eighteenth century that a more eclectic

 $^{^{183}}$ Grantland S. Rice The Transformation of Authorship in America (1997).

¹⁸⁴ NEIL LONGLEY YORK, MECHANICAL METAMORPHOSIS: TECHNOLOGICAL CHANGE INREVOLUTIONARY AMERICA (1985).

¹⁸⁵ Rice, *supra* note 183, at 3.

¹⁸⁶ *Id.*, at 1.

 $^{^{187}}$ 1 John Tebbel, A History of Book Publishing in the United States 15 (1972).

¹⁸⁸ 1 Tebbel, *supra* note 187, at 13-15, 51-56; Hugh Amory, *Printing and Bookselling in New England 1638-1713*, in 1 A HISTORY OF THE BOOK IN AMERICA: THE COLONIAL BOOK IN THE ATLANTIC WORLD (Hugh Amory & David D. Hall eds. 2000); David Hall, *Readers and Writers in Early New England*, in 1 A HISTORY OF THE BOOK IN AMERICA: THE COLONIAL BOOK IN THE ATLANTIC WORLD 118, 142-151 (Hugh Amory & David D. Hall eds. 2000).

print culture with a slowly growing share of literary materials appeared in America. 189

This development was reflected in the legal regulation of publishing. Until the late eighteenth century regulation of the printing press had nothing to do with authorship. The press was seen as a public tool that had to be both tightly regulated and encouraged in order to make sure it served the public good. To the extent that exclusive economic privileges were involved, they were awarded to publishers or printers who undertook a publishing project of government related materials, usually the laws of the colony. ¹⁹⁰ Authors and authorship began to be recognized only at the very last minute of the colonial period and later with the appearance of legislative grants to authors. The states' general copyright statutes and then the federal regime irrevocably fixed authors as the new focus of copyright protection.

Similar to the British context, in America too it was in the lobbying process, the petitions and the actual texts of those early protections of authors that a new concept of authorship was constructed. Some of the early developments were ambiguous. John Ledyard's 1783 petition to the Connecticut legislature for exclusive publishing rights of his book made little reference to authorship. Rather his petition, in the vein of the familiar pattern of asking for encouragement for a particular contribution to the public good. emphasized that the book about his journeys with Captain Cook "will not only be meritorious in himself but may be essentially usefull to America in general but particularly to the northern States by opening a most valuable trade across the north pacific Ocean to China & the east Indies." Other petitions, however, began to strongly emphasize authorship itself as both an activity of creative intellectual labor that entitles the creator to its fruits and as a contribution to the public good that had to be encouraged. Agitation before the Continental Congress and the states for general copyright statutes produced even stronger versions of the new vision of authorship. Joel Barlow, for example, explained in his letter to the Continental Congress that

¹⁸⁹ 1 Tebbel, *supra* note 188, at 55-56; Elizabeth Carroll Reilly and David D. Hall, *Customers and Markets for Books*, in 1 A HISTORY OF THE BOOK IN AMERICA: THE COLONIAL BOOK IN THE ATLANTIC WORLD 387-399 (Hugh Amory & David D. Hall eds. 2000).

¹⁹⁰ Chapter 3, sec. II(A).

¹⁹¹ HELMUT LEHMANN-HAUPT, THE BOOK IN AMERICA: A HISTORY OF THE MAKING, THE SELLING, AND THE COLLECTING OF BOOKS IN THE UNITED STATES 89 (1939).

"...there is certainly no kind of property, in the nature of things, so much his own as the works which a person originates from his own creative imagination." 192

The discovery of authorship in America around the revolution was fueled by a rising nationalistic sense of pride and aspiration to place the new republic among the civilized and enlightened nations of the world. ¹⁹³ Within these arguments, however, there emerged the image of the author as the creator of original ideas, and as proprietor of those ideas. The preamble of the Massachusetts statute provided a vivid description of this image:

"Whereas the improvement of knowledge, the progress of civilization, the public weal of community, and the advancement of human happiness, greatly depend on the efforts of learned and ingenious persons in the various arts and sciences: as the principle encouragement such persons can have to make great and beneficial exertions of their nature must exist in the legal security of the fruits of their study and industry to themselves; and as such security is one of the natural rights of all men there being no property more peculiarly a man's mown than that which is produced by the labor of his mind:" 194

By the time of the federal regime, individual authors were placed in the position of the unquestioned subjects of copyright protection. Moreover, a detailed image of the author as the owner of his original ideas was constructed and introduced to copyright discourse. To the extent that some of the nuances of this image produced by the massive British literature were still

¹⁹² IV Papers of the Continental Congress 369-373 (No. 78).

¹⁹³ See Benjamin T. Spencer, The Quest for Nationality: An American Literary Campaign 12 (1957). See also Barlow's argument that while the United States had already proven its worth "[a] literary reputation is necessary in order to complete her national character." IV Papers of the Continental Congress 370 (No. 78).

 $^{^{194}}$ Copyright Enactments of the United States 1783-1906 14 (Thorvald Solberg ed. $2^{\rm nd}$ ed. 1906).

lacking, they would be imported in the next decades¹⁹⁵ and in America's own literary property battle in the 1830s. ¹⁹⁶

A similar process occurred with inventions and inventors. For most of the colonial period there was no special preoccupation in America with either technology or invention. While there hardly existed there any of the outright hostility to technology sometimes exhibited in England by the lower classes that felt its adverse effect, neither was there any of the later fascination with it. The colonial economy was predominately agrarian and technological innovation was usually not closely associated with economic prosperity or strength. The change began to occur in the second half of the eighteenth century in the context of the growing friction with the mother country. While the more famous of the colonists' complaint about Imperial relations focused on trade, a less prominent subset of complaints dealt with technological isolation and restrictions. Technology came to be associated more with economic prosperity and with self-sufficiency and became a coveted goal. Alongside frustration on the imperial level, there gradually emerged awareness and activity on the home front. The 1760s brought about a home manufactures movement and a wave of local manufacturing societies that worked to raise awareness of and encourage local manufactures. 197

Growing awareness of technology did not necessarily mean a comparable rise in the significance of inventors and invention in the modern sense. Invention was not usually identified as a major source of technological development. Thus much of the focus of technological enthusiasts was on transfer of foreign technology and on enticement of skilled craftsman from abroad. ¹⁹⁸ It was only gradually that an association between invention and technological progress was formed, and the glorification of the genius inventor started to emerge. Manufacturing and useful arts societies that proliferated since the 1760s actively worked to create such public awareness

¹⁹⁵ For a survey of publications constructing the image of the author as a proprietor in the context of early nineteenth century American copyright debates see: Rice, *supra* note 183, at 88-92.

¹⁹⁶ See Chapter 3 sec. B(1).

¹⁹⁷ York, *supra* note 184, at 8-29; Hugo A. Meier, *American Technology and the Nineteenth Century World*, 10 Am. Quart. 116, 117 (1958).

¹⁹⁸ See: York, *supra* note 184, at 37-41; DORON S. BEN-ATAR, TRADE SECRETS: INTELLECTUAL PIRACY AND THE ORIGINS OF AMERICAN INDUSTRIAL POWER (2004) Chapters 4-5.

and to stimulate local inventions by distributing prizes and premiums. ¹⁹⁹ Many point at the revolution as an important landmark that galvanized those developing attitudes toward technology and invention. ²⁰⁰ Technological innovation and invention came to be seen by many as the key for economic prosperity, progress and national prowess. Gradually inventors were beginning to be more strongly associated with such technological innovation and social progress. ²⁰¹ In 1787 Joel Barlow, who glorified authors in his letter to Congress, did the same in regard to inventors, this time not in a congressional petition but rather in a poem:

"While rising clouds, with genius unconfined, Through deep inventions lead the astonish'd mind, Wide o'er the world their names unrivall'd raise, And bind their temples with immortal bays."

One of the main sites where the new image of the genius inventor arose and was constructed was in writings, petitions and official documents related to patent protection. Early colonial legislative patent grants were based on the notion of encouraging an economic activity useful to the public good, with little regard to the modern concept of inventors. ²⁰³ Things began to change, however with the late colonial and the state grants. A rising consciousness of the distinct categories of technological innovation and the genius inventor is apparent in many of those grants. Thus for example, the

York, *supra* note 184, at 41- 44. On the later post-independence incarnation of such societies and organizations see: Ben-Atar, *supra* note 198, at 93-103; BROOKE HINDLE & STEVEN LUBAR, ENGINES OF CHANGE THE AMERICAN INDUSTRIAL REVOLUTION 1790-1860 90-91 (1986).

York, *supra* note 184, at 112-127. John F. Kasson, Civilizing the Machine: Technology and Republican Values in America 1776-1900 3 (1976); Brooke Hindle, Emulation and Invention 1-23 (1981); Meier *supra* note 197, at 117-119; Lawrence A. Peskin, *From Protection to Encouragement: Manufacturing and Mercantilism in New York City's Public Sphere*, 1783-1795, 18 J. of the Early Republic 589 (1998); Jennifer Clark, *The American Image of Technology from the Revolution to 1840*, 39 Am. Quart. 431 (1987).

 $^{^{201}}$ York, supra note 184, at 183-206, Hindle & Lubar, supra note 200, at .74-75.

²⁰² JOEL BARLOW, THE VISION OF COLUMBUS 203 (1787).

²⁰³ See Chapter 1, sec. II(A).

preamble of the 1788 South Carolina grant to Briggs and Longstreet explained that:

"the principles of natural equity and justice require that authors and inventors should be secured in receiving the profits that may arise from the sale or disposal of their respective writings and discoveries, and such security may encourage men of learning and genius to publish and put in practice such writings and discoveries as may do honor to their country and service to mankind."

In 1792 Joseph Barnes published a pamphlet called *Treatise on the Justice, Policy and Utility of Establishing an Effectual System for Promoting the Progress of Useful Arts by Assuring Property in the Products of Genius*²⁰⁵ Barnes who was the attorney of the inventor James Rumsey was active both in promoting individual patent petitions and in lobbying for statutory reform His argument for "mental property" in inventions was as elaborate as any of the British theoretical discussions of literary property and his image of the genius inventor was the exact twin of the original author. After exalting the virtues of property Barnes went on to explain that it consisted of "two species viz. local and mental" and elaborated: "by the latter is understood the product of genius which consists in discoveries in science and in useful arts." After brushing aside a host of objections to mental property, Barnes concluded that there existed "natural and *equal* right which inventors have to *claim* of society to have property secured in the *products* of their *genius*, as in the products of industry or local property."

One last example of this rising image of the inventor must be cited, since it demonstrates both the construction of this image and a pressing sense of its novelty and fragility. In 1807 the New England Association of Inventors and Patrons of the Useful Arts published its *Remarks on the Rights*

 $^{^{204}}$ V Statute at Large of South Carolina vol. 71 (Thomas Cooper ed. 1837-1868).

²⁰⁵ JOSEPH BARNES, TREATISE ON THE JUSTICE, POLICY AND UTILITY OF ESTABLISHING AN EFFECTUAL SYSTEM FOR PROMOTING THE PROGRESS OF USEFUL ARTS BY ASSURING PROPERTY IN THE PRODUCTS OF GENIUS (1792).

²⁰⁶ *Id.*, at 4.

²⁰⁷ *Id.*, at 16.

of Inventors.²⁰⁸ The pamphlet attacked "nabobs" (contrasted with "nobles")²⁰⁹ under whose dominion the inventor "is not only degraded the lowest, but is the only being from whom... society wrests his property without his consent."²¹⁰ Despite its obvious self-serving character, the argument conveys a sincere sense of insecurity. Setting out to correct this wrong, the pamphlet offered a hierarchical classification of the benefactors of society: "The single consideration, that it is to the inventor's genius that we are indebted for transmuting particles of earth into iron, is sufficient to place him highest in the scale of useful beings. Next to him rank the farmer and mechanic, and to this trio the world indebted for all artificial enjoyments."²¹¹

By the turn of the eighteenth century inventors and authors became unequivocally the official center of patent and copyright law. Surrounding these fields there emerged a detailed discourse, constructing the image of the original author or genius inventor as the individual creator of new ideas ex nihilo. These ideological images contained virtually all the major elements that appeared in Britain during the eighteenth century. Is existing scholarship not right, then, in claiming that by the turn of the eighteenth century the complete modern version of the ideology of authorship was in place? Moreover, is it not right also in respect to patent law and the American context? The answer is that it is only half right. There is little doubt that an abstract discourse of this sort consolidated by the end of the eighteenth century and became the official framework for publicly debating copyright and patent issues. It is just as important, however, that at that time it was still an abstract theoretical account that had almost no foothold within the actual institutional doctrinal details of law. One could find these new elaborations of copyright and patents as the creator's property right in intangible objects, in abstract debates about the nature and desirability of these regimes, in lobbying efforts and petitions or in declaratory preambles. Ordinary legal doctrine was almost unaffected. The only difference, in this respect, was that since 1790 inventors and authors were firmly identified as the direct original owners of the rights. ²¹² That was about all. Who exactly is an author/inventor

²⁰⁸ Remarks on the Rights of Inventors and the Influence of their Studies in Promoting Enjoyments of Life and Public Prosperity (1807).

²⁰⁹ *Id.*, at 13.

²¹⁰ *Id.*, at 8.

²¹¹ *Id*.

²¹² Paradoxically in the later nineteenth century process of embedding authorship ideology in doctrine even this most basic feature of authorship-

and how is he distinguished from non-authors/inventors? What exactly is the intellectual work/invention? What are the implications of the essential elements of authors/inventors and works/inventions to the new category of ownership of intellectual works? The theoretical discourse touched upon these fundamental issues and had important implications. But turn of the eighteenth century legal doctrine remained almost completely unchanged and oblivious to such implications.

This is not a trivial point. The nuts and bolts of "everyday" copyright and patent law were the site where authorship and ownership of intangible ideas were to be converted from abstract constructs into concrete social practices, where those theoretical concepts were to receive their actuality and their specific content. Yet by the end of the eighteenth century this was yet to happen. These legal fields were in a state of transition. On the one hand, their official justification and dominant abstract representation had shifted to a new set of concepts of original authorship and property in intangibles. On the other hand, their actual doctrinal structures did not yet internalize this conceptual shift. Copyright and patent had the preconceptions of a preauthorship era hardwired into their institutional details, but were adorned in the new theoretical justification of authorship and ownership.

When during the nineteenth century the new notions of authorship diffused into actual doctrinal structures and transformed them, it was not a process in which a predetermined logic was merely implemented or elaborated. The process was, rather, mediated through human agency and economic interests. Interested parties who turned to the law found that authorship and inventorship constituted a pool of rhetorical resources on which they could draw and in whose terms they had to couch their claims. As they were drawing on these preexisting materials they also maneuvered and changed them to fit their cause. Similarly, when judges and commentators were engaged in the process of converting abstract theories into legal doctrine

based law was eroded. When creation and invention occurred in the employment context- an increasingly common phenomenon toward the end of the century- legal doctrine developed as to often vest the initial ownership in the employer, rather than the employee who was the actual author or inventor. The work of Catherine Fisk provides a thorough survey of theses developments which are outside the scope of this work. See L. Fisk,, Removing the 'Fuel of Interest' from the 'Fire of Genius' Law and the Employee Inventor 1830-1930, 65 U. Chi. L. Rev. 1127 (1998); Catherine L. Fisk, Authors at Work: The Origins of the Work-for-Hire Doctrine, 15 Yale J. L. & Human. 1 (2003).

the process was shaped by a host of other ideological forces and influences, including the ones detailed in the previous sections. The outcome, rather than being an implementation of a preexisting framework, was a new complex structure of authorship and ownership of ideas that was built into the doctrine.

In copyright law this process happened mainly in the context of the doctrines that defined originality, the protected intellectual work, and the owner's set of entitlements. The notion of originality was one of the main foundations of the new abstract concept of authorship. Thus it is hardly surprising that it began to penetrate legal discourse during the nineteenth century. Originality penetrated actual copyright law beginning in the late 1820s as part of numerous local conflicts between opposing commercial interests. In such conflicts typical defendants tried to deploy lack of originality arguments in order to deprive copyrighted works of protection and escape infringement charges. As the scope of protection steadily expanded in the succeeding decades to cover a territory well beyond verbatim copying, the stakes of originality as an escape hatch for alleged infringers became even higher. At the other end were typical plaintiffs and owners of copyright who exerted substantial pressures for minimizing the bite of any originality requirement in order to maximize the availability of copyright protection and avoid a demanding standard that could be satisfied only by a small fraction of potentially protectable materials.

Given the official justification of copyright, a requirement of originality could hardly be denied. As Curtis put it in his treatise an "Author... ex termini imports originality." But originality as it developed in copyright law was very different than the ideal theoretical concept. A combination of forces worked to create a much thinner doctrinal concept of originality. Attempts to escape liability under the growing scope of copyright created the initial impetus for introducing originality arguments and sustained a continuous resort to them. Pulling in the opposite direction, however, was a steady ever-growing pressure to expand copyright protection as to cover a growing scope of commercial commodities. The force of this pressure was exerted, of course, in the direction, of minimizing the effective requirements of originality. Economic interests were joined by the ideological forces described above. The decline of a commonwealth style mode of government and a rising market concept of value both created a consistent growing suspicion toward ad hoc governmental assessments of substantive value.

²¹³ Curtis, *supra* note 36, at 169, note 1.

The net outcome of this complex interaction over a period of a century embedded in copyright law a mutation of the notion of originality, quite different than that of the abstract ideology of authorship from which it was derived. This mutation was an intricate structure full of tensions, contradictions and conflicting ingredients. It flaunted originality as the essential foundation of copyright protection, while reducing the doctrinal requirement to a thin minimum which stood in stark contrast to the theoretical concept.

A similar process occurred with the legal doctrines that defined the scope of copyright protection and the set of entitlements conferred on the owner. At the end of the eighteenth century copyright still had the form of the limited trade privilege to print a text. Changing patterns of economic activity created, however, a continuous pressure to expand the scope and strength of copyright protection. At the heart of these changing patterns were technological innovations in the mass production of books and the transportation revolution that together created an emerging national market for books and a national publishing industry. ²¹⁴ The publishing industry became increasingly commercialized and rationalized. While in the early nineteenth century publishers often operated as mere distributors on behalf of authors, by mid-century publishers assumed general responsibility for all stages of producing and marketing the book as a commodity to a growing number of consumers.²¹⁵ This newly emerging industry became geared toward creating and capturing consumer demand and markets. ²¹⁶ By the end of the century and in the next one other commercialized "content" industries motivated by similar purposes began to appear. 217 Again, when interests had to be translated to legal arguments the ideology of authorship was one of the main vehicles at hand. Two main authorship based strategies were repeatedly

²¹⁴ See Ronald J. Zboray, A Fictive People: Antebellum Economic Development and the American Reading Public (1993).

 $^{^{215}}$ William Charvat, Literary Publishingin America 1790-1850 43-54 (1959). Isabelle Lehuu, Carnival on the Page- Popular Print Media in Antebellum America 60 (2000).

²¹⁶ Zboray, *supra* note 214, at 13; Lehuu, *supra* note 215, 71-72; Charvat, *supra* note 215, at 56-60; James N. Green, *From Printer to Publisher: Mathew Carey and the Origins of Nineteenth Century Book Publishing*, in GETTING THE BOOKS OUT: PAPERS OF THE CHICAGO CONFERENCE ON THE BOOK IN 19TH-CENTURY AMERICA (Michael Hackenberg ed. 1987).

²¹⁷ PAUL STARR, THE CREATION OF THE MEDIA: POLITICAL ORIGINS OF MODERN COMMUNICATION (2004) Chapters 9-11.

employed to bring down the old structure of copyright as the privilege to print copies and erect a new one. The first strategy built on the notion that copyright, rather than an economic privilege to print, was ownership of an intellectual entity created by the author. Thus, there gradually developed an elaborate representation of the intellectual work as an intellectual essence that could take a manifold of concrete forms. Copyright, in turn, was presented as a general control of this elusive intellectual essence irrespective of form or medium. The second strategy was the rise of a previously non-existent categorical hierarchy between original and derivative works.

On the ideological plane, pressures to expand protection found support in concepts of market value. The intellectual works as covering a multiplicity of forms and the notion of value of derivative markets defined and augmented each other.²²¹ The main countervailing ideological force was a growing anxiety about limitations on the free flow of knowledge and information, about, to use Lord Camden phrase, knowledge and science being "bound in...cobweb chains." The question of the shape and the level of constitutional protection of free speech aside, ever since the revolutionary era the free flow of information and ideas had been a constitutive fundamental ethos in the United States.²²³ In such a society the specter of tight control of the circulation of information was troubling. The steadily expanding scope of copyright protection and its rising understanding as general control of intellectual entities intensified this anxiety. The main expression of this countervailing force was the insistence that protection was limited to a concrete form of expression leaving all ideas free as the air. As the anxiety intensified during the late nineteenth century, the importance of the idea/expression dichotomy soared and it was elevated to a status of a fundamental principle.

Again this interaction of various influences left copyright doctrine and the scheme of authorship embedded in it not as a coherent whole. Rather, it was full of conflicting ideas and brimming with tensions and contradictions.

²¹⁸ Chapter 3, sec. C(1)(d).

²¹⁹ Chapter 3, sec. C(2).

²²⁰ Chapter 3, sec. C(2)(c).

²²¹ Chapter 3, sec. C(1)(a).

²²² Donaldson v. Becket, 17 Parl. Hist. Eng. 1002 (1774).

²²³ Starr, *supra* note 217, at 62-71 (2004); LEONARD W. LEVY, EMERGENCE OF A FREE PRESS (1985).

One such major tension was between the expansion of the work and the newly dominant notion of multiplicity of forms incorporated into one intellectual work, as opposed to the idea/expression dichotomy and the insistence that copyright extended to concrete expressions only. Another was between the sharp original and derivative distinction that developed in the context of infringement and entitlements as compared to the meager standard of originality required as a condition for protection.

Turning to patent law, one finds a very similar pattern. As the pure concept of inventorship was embedded in doctrine during the nineteenth century, it was mediated through a series of different forces and influences. The outcome was very different than the theoretical ideal construct. This was apparent in the context of the non-obviousness requirement and in the areas of rules that defined patentability and infringement.

As for non-obviousness, turn of the eighteenth century patent law that was still based on pre-inventorship concepts did not have such a requirement. The fact that the modern non-obviousness doctrine appeared only in the second half of the nineteenth century, does not mean, however, that notions of inventorship did not diffuse into patent doctrine earlier. As we saw, a requirement of an "inventive quality" appeared and thrived during this earlier period within the substantial novelty standard. 224 As in the case of originality, it appears that substantial novelty arguments were devised and introduced by defendants who tried to escape liability by attacking the validity of patents. The image of the inventor as the introducer of completely new and innovative technology was wielded by such parties and breathed life into the doctrinal requirement they created. The later stage in which non-obviousness displaced substantial novelty seems to correspond to the rising notion of market value and to the declining willingness of judges to engage in any ad hoc evaluation of public utility. The main difference between the two doctrinal forms was, as described, the disappearance of the early associating the inventive quality with substantive advancement or utility and its construction as an objective criterion. 225 Non-obviousness was thus shaped as a strong manifestation of patent law allegiance to the concept of the inventor that simultaneously strongly denied the need to resort to substantive evaluations of value or utility.

The construction of the object of ownership through doctrines of patentability and infringement tracked even more closely the parallel process

²²⁴ Chapter 4, sec. C(B)(2)(a).

²²⁵ Chapter 4, sec. C(B)(2)(b).

in copyright law. During the nineteenth century patents increasingly involved economic conflicts with high stakes to control markets and defend against competition. The fact that Morse and Bell were two of the seminal cases in the field seems hardly incidental. Both involved attempts to use patents to create the foundation of and patrol the borders of national economic empires built around technological innovations. The patent pool mechanism first introduced around the middle of the century in the sewing machines industry, was another examples of a growing reliance on patents as a strategy of rationalized control and structuring of the market by dominant players. 226 This created a constant pressure toward the expansion of the scope of patent protection. The notion of the object of property as an intangible entity created by the inventor was a fertile ground for constructing arguments to support such an expansion. Like the work, the invention came to be seen as an intellectual essence that covered many concrete embodiments. This concept could be stretched and expanded to encompass new terrains. Finally, in this context too there was a countervailing ideological force. A dominant ethos of science as based on the free flow of knowledge created anxiety about strict control of information or the private control of scientific knowledge seen as "the common property of mankind." The expression of this anxiety was the development of rules of patentability and firm refusal to allow the patenting of abstract ideas or rules of nature.

The net-outcome was again a system full of tensions and conflicting commitments and a gap between rhetoric and reality. Judges and commentators clung to and trumpeted the assurance against the enclosure of knowledge offered by patentability rules. At the same time doctrines of infringement accompanied by the concept of patent as control over an elusive intangible entity proved to be flexible tools. They could be used to transform one day's unpatentable principles to protectable concrete inventions in the next. ²²⁸

By the end of the nineteenth century there was a new structure of authorship and inventorship embedded in the actual doctrines of patent and copyright law. It was not the mere doctrinal expression or elaboration of the preexisting eighteenth century abstract theoretical version of those concepts.

²²⁶ See: DAVID A. HOUNSHELL, FROM THE AMERICAN SYSTEM TO MASS PRODUCTION 1800-1932: THE DEVELOPMENT OF MANUFACTURING TECHNOLOGY IN THE UNITED STATES 67-68 (1984).

²²⁷ Detmold v. Reeves, 7 F. Cas. 547, 549 (C.C.E.D.Pa. 1851).

²²⁸ Chapter 4, sec. B(1)(d).

It was, rather, a new complex structure, full of tensions and conflicting commitments that was produced by a century long interaction between the ideology of authorship, other powerful influences and human agency. This observation can be generalized and be applied to the entire structural development of the modern conceptual framework of owning ideas, surveyed in this work. By the dawn of the twentieth century this framework was the outcome of a three hundred years interaction of this kind that fundamentally reshaped its early origins. To say that to a large extent this outcome is our inheritance is not to deny that this transformation process continued during the last century. This, however, is a subject for another dissertation.